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Ratekin's

ANNUALS

1916

32nd
YEAR

2/6/16
BV 3/3/6
Special
15c Pkt



Ratekin's
20-Day White Radish
15c. Pkt.

RATEKIN'S SEED HOUSE

SHENANDOAH, IOWA, U. S. A.

LARGEST SEED HOUSE IN THE WEST

RATEKIN'S SEED HOUSE

SHENANDOAH, IOWA

Oldest and Largest Seed House in the West

1884=====THIRTY-SECOND ANNUAL SEED CATALOGUE=====1916



To Our Friends and Patrons:

With hearty greetings and well wishes to all our two hundred thousand customers, distributed throughout every state in the Union, we extend this personal message and wish you health and prosperity the coming year.

Never in the history of the world was there such opportunity afforded the American farmers as at present. The European war, while devastating and destructive to the Old World, gives, and will continue to give this country the greatest prosperity it has ever known, which will continue for at least another year even if peace was declared tomorrow. Think of it; the exports from this country to foreign countries during the year ending July 1st, 1915, were a Billion Dollars More than the Imports. This means, that this country has that much More Cold Cash than it had at the beginning of the year. The outlook, even with the enormous agricultural crops of this country the past year continue to advance in price, and the best informed believe the corn crop that will be grown this year will command 80c to \$1.00 per bushel; wheat \$1.25 to \$1.50; oats 70c to 80c, and other farm products in proportion, except cotton, will continue to remain below remunerative prices until the war is over and foreign mills started, but then at reduced normal prices. Now, Brother Farmer, is the time to Dig Old Mother Earth as Never Before.

RATEKIN'S SEED HOUSE

J. M. Ratekin
Manager

Suggestions to Customers **FREE PREMIUMS**—We allow every customer to select his or her own premium on the basis of 25c WORTH OF SEEDS EXTRA for every dollar remitted for Packets and Ounces. This premium must be selected in packages and ounces only. This discount does not apply for seeds in larger quantities and not to collections of vegetables and flower seeds.

Our Terms Are Strictly Cash with Order We send nothing C. O. D. Every item entering into the Seed Business is spot cash. Cash buys the best of everything. When cost of seed, postage and other necessary expense is paid good, high-grade seeds are sold on a very small margin. It is not big profits on a single order, but the large volume of business we do that enables us to make you bargain prices and give you the most for your money. Our constant aim is to make the highest quality the first consideration, and next to put our prices as low as good seed can be sold.

Delivery The point of delivery of all heavy goods is on cars at Shenandoah. When we quote a delivered price at your station it means we prepay the freight or express charges.

Order Early The best time to order is just as soon as you receive this catalogue, as we can always give your orders more of our personal attention if they come in before the rush of the spring.

What We Guarantee We guarantee the safe delivery of all goods ordered from us, whether by mail, express or freight. That all money sent to us for seeds shall reach us if sent by registered letter, postoffice or express money order, or bank draft made payable to our order, or your personal check, if you have the money back of it to make it good. That your orders will be filled promptly and with care. Keep a copy of your order. Sometimes people think they have ordered articles which they have omitted, and blame us for not sending them. Please be careful to sign your name, postoffice, state and rural route plainly.

About Warranting We thoroughly test all our seeds and nothing is sent out which we do not believe to be of good, strong germination and that will grow under any reasonable conditions; still crops are contingent upon so many conditions, etc., over which we have no control, including soil, weather, time and manner of planting, cultivation, etc., that we cannot be responsible for the product and give no warranty, expressed or implied, as to description, quality, quantity or productiveness of any seed sent out by us, and every order for seeds named in this catalog will be executed on these conditions only, and if the purchaser does not accept the seeds on these terms and conditions they are to be returned at once. It however, must be plain to everyone who gives the matter the slightest thought, that it is to our best interest to send out only such seed stock as will not only grow, but prove true to name and description. However, we have so much confidence in our seeds that we hereby agree to refill any retail order for vegetable or flower seeds free of charge should they prove otherwise than as we represent them. We know of no responsible seed firm in the world which guarantees seeds any further than this.

Prepaid Stations Many of our customers live at points known as prepaid stations, where there is no agent. In such cases you should always send money enough to prepay freight charges through to such points, otherwise we will ship to nearest station where there is an agent.

Premiums Each year we put up thousands of packets of new or particularly desirable varieties of seeds for free distribution to our customers. We will send these out with the seeds ordered by you and will treat you liberally in this respect. We shall also try to please our plant customers by adding something to their order when shipping it.

Market Gardeners and others who buy vegetable seeds in bulk to the amount of \$5.00 or more are requested to send their list of seeds wanted to us and let us make special quotations.

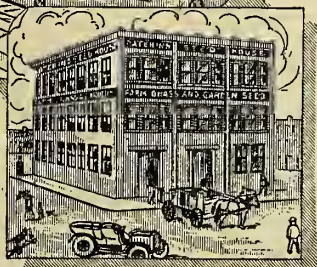
ERRORS—We make them—so does every one—and we will cheerfully correct them if you will write to us. Try to write to us good naturedly; but if you cannot then write to us anyhow.

RATEKIN'S

32nd ANNUAL ANNOUNCEMENT



WAREHOUSE AND
PACKING DEPARTMENT
VALLEY AND GRAIN ST.



GENERAL OFFICE, ELM AND VALLEY ST.

To those who are interested in the crops they grow and want to produce bigger, better and more bountiful crops of all kinds, for the farm and garden, we would ask and believe it will pay you to read this book through carefully whether you are one of our customers or not. In it we have tried to give you the best information we could to help you to grow bigger and better crops and make more money. We have also tried to describe both by photographs and illustrations and with pen all our seeds. We have also tried to make everything plain to our customers and friends, but after you have looked it through if there is any questions you wish to ask, write us and we will be glad to give you any further information we can.

OUR POSITION TOWARD OUR CUSTOMERS

No house ever had a more loyal class of customers than we have had throughout our long experience in the seed business. For this reason we want to sincerely thank them and to say a word about our position toward all of them.

During the course of a year we send out a great deal of printed matter and advice through our catalogues, booklets, circulars and thousands of letters, in reply to inquiries, etc. But we make it an absolute rule never to advise any man or woman to plant anything we would not be willing to plant ourselves for general farm or garden purposes.

Why? Because we want you to grow good crops, bumper crops, from our seeds, well knowing that good crops and good and profitable results from our seeds make good and permanent customers. We have been in the seed business here at Shenandoah now thirty-two years and hope to remain in the same business many years more. and we want your trade and the trade of your neighbors and friends, but we cannot expect it unless we send you good seeds from which you can obtain good and profitable results. These things combined give confidence, and the first principles of business are founded on, and is the basis of, confidence.

Sincerely yours,

J. W. RATEKIN, Mgr.

IOWA, THE ONLY BILLION DOLLAR STATE

Our home is in Iowa, westward toward the setting sun, just between two mighty rivers, where flowing waters run. It has towns, it has cities; it has many noble plains. It has ninety-nine counties, and all have honored names.

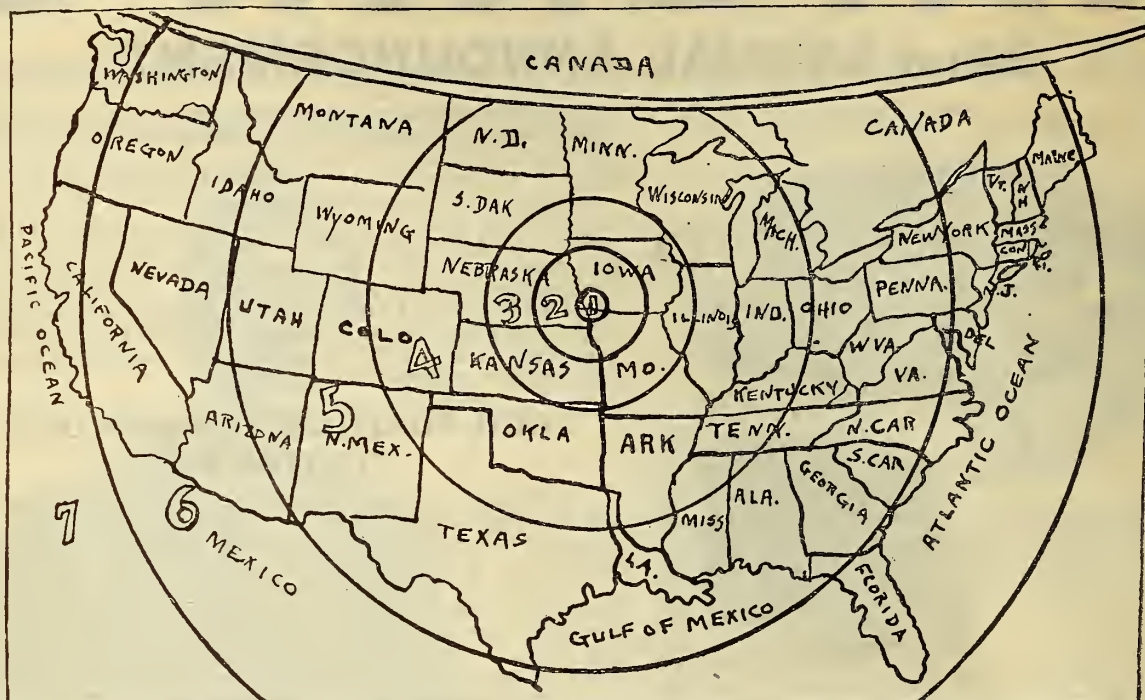
Shenandoah is located in the extreme southwestern part of the state, in Page County, which borders the Missouri line on the south, adjoining Fremont County on the west which is the extreme southwestern county in the state—the very best and most fertile part of the state of Iowa, 485 miles west of Chicago on the Chicago, Burlington and Quincy Railroad, 366 miles northwest of St. Louis and fifty miles southeast of Omaha and Council Bluffs on the main line of the Wabash Railroad, and 162 miles north of Kansas City and 100 miles from St. Joseph, being the terminus of the Keokuk and Western Railroads; thus we have the benefit of three trunk lines of railroads and two express companies, Adams and Wells, Fargo & Co., reaching all the leading cities and railroad centers of the country direct. This county has the distinction of producing more corn—area considered—than any other territory in the world. Twenty-two by twenty-four miles square, produced six million, two hundred thousand, six hundred and thirty-two bushels of corn as shown by the United States census report. This is equal to the combined production of corn of the following states: Maine, Massachusetts, Rhode Island, New Hampshire, Connecticut and Vermont, and equal to the production of more corn than any one of ten other states.

WHAT IOWA'S GOVERNOR SAID—Governor Clarke, sitting in his office, said: "I was greatly pleased with the news that the Iowa agricultural exhibit at the Panama-Pacific exposition at San Francisco was awarded the grand prize. We have been telling the people of the world of Iowa's greatness and nothing demonstrates it better than the capture of the greatest prize the Panama exposition had to offer. We have the stuff here in Iowa in the way of agricultural exhibits and can outclass any other state in the union. "It is remarkable that of 289 Iowa exhibitors, all won prizes for individual displays. It is wonderful." The display which won the grand prize for Iowa occupied one of the best spaces in the agricultural building. The central feature was a horn of plenty, from which flowed fine Iowa corn. The corn was placed on frame work and it appeared that there were a dozen car loads of corn in the huge pile which was 54 feet wide at the base and 30 feet high. This display heralded Iowa as the only billion dollar state in the union. It was shown that Iowa's field crops and live stock in 1914 were valued at one billion, forty million, seven hundred sixty-six thousand, nine hundred and nineteen dollars. Small exhibits from Iowa are under the frame work which supports the big pile of corn. There were also many photographs showing beautiful scenes in this state.

Iowa, produced in 1914, one hundred and sixty-three million bushels of oats, twenty-seven million bushels more than Illinois, its nearest competitor; three hundred and seventy-nine million bushels of corn, seventy-four million bushels more than Illinois, next highest state in production of corn.

PARCELS POST

This map shows you where we are located and you can see at a glance what zone you are in from our place, and by referring to the table below you can tell what Parcel Post charges would be on Seeds and Merchandise from here to points within your zone. Remember that a fraction of a pound is always charged as a full pound. For instance 17 ounces would be called 2 lbs. Here are the rates. Read first inside cover page for additional information.



Express Rates FROM SHENANDOAH, IOWA, TO POINTS NAMED BELOW.

Weight lbs									10 15 100			10 15 100				
	1st Zone	2nd Zone	3rd Zone	4th Zone	5th Zone	6th Zone	7th Zone	8th Zone	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.		
1	\$.05	\$.05	\$.06	\$.07	\$.08	\$.09	\$.11	\$.12	Albany, N. Y.	\$.42	\$.58	\$ 2.40	Louisville, Ky.	\$.33	\$.42	\$ 1.95
2	.06	.06	.08	.11	.14	.17	.21	.24	Aberdeen, Miss.	.37	.49	2.40	Lexington, Ky.	.35	.45	2.10
3	.07	.07	.10	.15	.20	.25	.31	.36	Akron, Ohio	.36	.45	2.14	Montgomery, Ala.	.40	.53	2.67
4	.08	.08	.12	.19	.26	.33	.41	.48	Aberdeen, S. D.	.32	.41	1.84	Macon, Ga.	.42	.57	2.89
5	.09	.09	.14	.23	.32	.41	.51	.60	Amarillo, Tex.	.38	.49	2.40	Miles City, Mont.	.44	.58	3.00
6	.10	.10	.16	.27	.38	.49	.61	.72	Ahingsdon, Va.	.42	.55	2.82	McAllister, Okla.	.33	.42	1.95
7	.11	.11	.18	.31	.44	.57	.71	.84	Atlanta, Ga.	.41	.54	2.70	Manti, Utah	.52	.71	3.87
8	.12	.12	.20	.35	.50	.65	.81	.96	American Falls, Ida.	.25	.29	4.05	Madison, Wis.	.32	.40	1.80
9	.13	.13	.22	.39	.56	.73	.91	1.08	Bingham, Utah	.53	.72	3.94	New Madrid, Mo.	.27	.33	2.03
10	.14	.14	.24	.43	.62	.81	1.01	1.20	Butte, Mont.	.56	.77	4.24	New York, N. Y.	.43	.57	2.93
11	.15	.15	.26	.47	.68	.89	1.11	1.32	Boston, Mass.	.45	.59	3.08	New Orleans, La.	.44	.58	3.00
12	.16	.16	.28	.51	.74	.97	1.21	1.44	Beatrice, Nebr.	.25	.26	.87	New Haven, Colo.	.42	.57	2.89
13	.17	.17	.30	.55	.80	1.05	1.31	1.56	Buffalo, N. Y.	.37	.48	2.33	Nashville Tenn.	.36	.45	2.18
14	.18	.18	.32	.59	.86	1.13	1.41	1.68	Birmingham, N. Y.	.41	.54	2.70	Okolona, Miss.	.37	.48	2.33
15	.19	.19	.34	.63	.92	1.21	1.51	1.80	Baltimore, Md.	.41	.54	2.70	Omaha, Nebr.	.25	.25	.68
16	.20	.20	.36	.67	.98	1.29	1.61	1.92	Birmingham, Ala.	.39	.57	2.48	Oklahoma City, Okla.	.32	.41	1.69
17	.21	.21	.38	.71	1.04	1.37	1.71	2.04	Bridgeport, Conn.	.42	.54	2.78	Ogden, Utah	.50	.58	3.64
18	.22	.22	.40	.75	1.10	1.45	1.81	2.16	Boulder, Colo.	.38	.49	2.40	Portland, Oreg.	.75	1.05	6.15
19	.23	.23	.42	.79	1.16	1.53	1.91	2.28	Boise, Idaho	.63	.88	4.99	Pittsburgh, Pa.	.36	.48	2.29
20	.24	.24	.44	.83	1.22	1.61	2.01	2.40	Chicago, Ill.	.30	.39	1.68	Philadelphia, Pa.	.40	.52	2.63
21	.25	.25							Cairo, Ill.	.31	.36	1.68	Providence, R. I.	.44	.58	3.00
22	.26	.26							Corinth, Miss.	.37	.48	2.33	Parsons, Kans.	.26	.31	1.20
23	.27	.27							Cameron, Mo.	.29	.34	.87	Phoenix, Ariz.	.68	.86	4.88
24	.28	.28							Cincinnati, Ohio	.34	.43	2.03	Pine Bluff, Ark.	.36	.47	2.25
25	.29	.29							Cleveland, Ohio	.35	.45	2.14	Pueblo, Colo.	.37	.48	2.40
26	.30	.30							Chamberlain, S. D.	.30	.39	1.20	Peoria, Ill.	.29	.36	1.68
27	.31	.31							Clarksburg, W. Va.	.36	.48	2.29	Pierre, S. D.	.32	.41	1.84
28	.32	.32							Cheyenne, Wyo.	.36	.47	2.25	Parkersburg, W. Va.	.36	.45	2.18
29	.33	.33							Dayton, Ohio	.35	.45	2.03	Rochester, N. Y.	.39	.50	2.48
30	.34	.34							Dodge City, Kans.	.30	.39	1.69	Rawlins, Wyo.	.43	.57	2.93
31	.35	.35							Detroit, Mich.	.35	.45	2.22	Scranton, Pa.	.40	.52	2.63
32	.36	.36							Denver, Colo.	.37	.48	2.25	Sioux Falls, S. D.	.26	.31	1.20
33	.37	.37							Deadwood, S. D.	.38	.49	2.40	Selma, Ala.	.39	.52	2.59
34	.38	.38							Dallas, Tex.	.36	.47	2.25	San Francisco, Cal.	.76	1.07	6.27
35	.39	.39							Enid, Okla.	.30	.39	1.69	Savannah, Ga.	.45	.61	3.19
36	.40	.40							Fargo, N. D.	.33	.42	1.95	Shreveport, La.	.44	.58	2.14
37	.41	.41							Faribault, Minn.	.29	.36	1.99	St. Paul, Minn.	.29	.36	1.50
38	.42	.42							Fall River, Mass.	.44	.58	3.00	St. Louis, Mo.	.30	.37	1.62
39	.43	.43							Ft. Wayne, Ind.	.32	.41	1.84	Springfield, Mass.	.30	.39	3.00
40	.44	.44							Ft. Scott, Kans.	.27	.33	.68	Spokane, Wash.	.67	.93	5.37
41	.45	.45							Galesburg, Ill.	.27	.33	1.62	Seattle, Wash.	.74	1.03	6.00
42	.46	.46							Grand Island, Nebr.	.26	.31	1.20	Terre Haute, Ind.	.31	.39	1.84
43	.47	.47							Grand Forks, N. D.	.36	.47	2.25	Topeka, Kans.	.25	.25	1.35
44	.48	.48							Guthrie, Okla.	.32	.41	1.84	Texarkana, Ark.	.38	.49	2.40
45	.49	.49							Huron, S. Dak.	.30	.39	1.69	Toledo, Ohio	.33	.42	1.95
46	.50	.50							Helena, Mont.	.56	.77	4.24	Tulsa, Okla.	.29	.36	1.50
47	.51	.51							Hastings, Nebr.	.26	.31	1.20	Valparaiso, Ind.	.30	.39	1.69
48	.52	.52							Henderson, Ky.	.32	.41	2.40	Wichita, Kans.	.27	.33	1.35
49	.53	.53							Helena, Ark.	.37	.48	2.33	Wilmington, Del.	.42	.54	2.78
50	.54	.54							Henrietta, Tex.	.36	.47	2.25	Wilmington, N. C.	.49	.66	3.53
									Jacksonville, Ill.	.29	.36	1.68	Wheatland, Wyo.	.36	.47	2.25
									Jackson, Tenn.	.35	.45	2.14	Des Moines, Ia.	.25	.29	1.05
									Kansas City, Mo.	.29	.34	.87	Richmond, Va.	.43	.57	2.93
									Lafayette, Ind.	.32	.41	1.84				

Through a great bug-a-boo and misunderstanding about the cost of transportation charges, largely due to misrepresentations by those who would prevent you from taking advantage of ordering your seeds direct from the grower, we want you to know that the freight charges should not cause you any uneasiness.

Freight Rates. How to Figure

Freight Rates. How to Figure Rates are based on a minimum charge and on the basis of so much per hundred pounds. A minimum rate or charge is the least amount for which a railroad will haul a freight shipment, no matter how small or short the distance. This rate varies from 25 cents over each railroad to 40 cents, but where a shipment consists of enough to absorb the minimum rate into the 100-pound rate the shipment will take the through 100-pound rate. For this reason and in order to obtain the cheapest and lowest classification a freight shipment should always weigh at least 100 pounds. Less shipments will usually go on a basis of minimum charge.

Express Rates and Charges

Express Rates and Charges. The express system is quick and economical when the weight is under twenty-five pounds, and in some cases even as much as fifty or sixty pounds. Any express office in the United States on a railroad can be reached from Shenandoah within sixty hours and less from time shipment is started, and if you are in a hurry and shipment is small the express system is the best to ship by. On a shipment based on twenty-five pounds at special seed rate varies from 30 cents to 75 cents, dependent on distance. Larger shipments according to weight.

LIST OF FREIGHT RATES FROM SHENANDOAH, IOWA, PER 100 POUNDS AT THIS DATE TO POINTS NAMED BELOW.

ALABAMA.

Birmingham . \$0.54

Montgomery . .54

Fruitdale . .57

Mobile . .47

Tuscaloosa . .54

Decatur . .54

Selma . .55

ARIZONA.

Phoenix . .230

Prescott . .230

ARKANSAS.

Hoxie . .63

Hope . .106

Fort Smith . .69

Parragould . .70

Blytheedale . .70

Brinkley . .72

Stuttgart . .76

Little Rock . .65

Pine Bluff . .76

Helena . .67

Bentonville . .50

Arkansas City . .60

Texasarkana . .89

Fayetteville . .55

De Vails Bluff . .60

Siloam Springs . .50

De Queen . .86

Ashdown . .86

CALIFORNIA.

Los Angeles . .140

Sacramento . .100

San Francisco . .140

San Jose . .140

Redding . .165

COLORADO.

Denver . .74

Greeley . .75

Pueblo . .75

Kit Carson . .75

Triunidad . .75

Leadville . .140

Ft. Morgan . .74

Holyoke . .73

Boulder . .74

Brush . .74

CONNECTICUT.

Bridgeport . .65

Hartford . .65

New Milford . .65

Litchfield . .65

New Haven . .65

Waterbury . .65

CANADA.

Chatham . .50

Bothwell . .50

St. Thomas . .50

Toronto . .50

Montreal . .62

Quebec . .68

London . .49

DELAWARE.

Dover . .62

Farmington . .62

Newark . .60

Wilmington . .60

GEORGIA.

Atlanta . .54

Brunswick . .55

Savannah . .55

Macon . .56

IDAHO.

American Falls . 1.50

Boise . .1.80

Spencer . .1.45

ILLINOIS.

Centralia . \$0.34

Canton . .30

Chicago . .32

Aurora . .32

Bushnell . .27

Beardstown . .27

Galesburg . .27

Galva . .30

Litchfield . .34

Monmouth . .27

Ottawa . .32

Peoria . .30

Quincy . .27

Rock Island . .27

Savanna . .27

Carthage . .27

Decatur . .30

Champaign . .32

Carmi . .42

McLeansboro . .40

Sidell . .40

Olney . .42

Cairo . .49

Murfreesboro . .47

Bloomington . .32

Paxton . .38

Jacksonville . .30

Springfield . .30

INDIANA.

Effner . .39

Adams . .48

Albany . .46

Ft. Wayne . .43

Indianapolis . .41

New Albany . .42

Terre Haute . .38

Huntington . .42

Vincennes . .37

North Vernon . .41

Muncie . .42

Lafayette . .40

Evansville . .45

Martinsville . .45

Greencastle . .42

Valparaiso . .43

Frankfort . .41

Michigan City . .44

Goshen . .43

IOWA.

Hamburg . .08

Carson . .10

Clarinda . .08

Cumberland . .13

Council Bluffs . .10

Chariton . .27

Clinton . .27

Creston . .11

Albia . .16

Burlington . .22

Des Moines . .16

Griswold . .09

Humeston . .13

Ottumwa . .17

Sioux City . .19

Manning . .25

Coon Rapids . .26

Tama . .34

Oskaloosa . .18

Marshalltown . .25

Hampton . .25

Storm Lake . .30

Cedar Rapids . .38

Rockwell City . .26

Spencer . .31

Spirit Lake . .32

Jefferson . .24

Sac City . .28

Davenport . .27

Dubuque . .27

Emmettsburg . .32

KANSAS.

Concordia . \$0.39

Atchison . .20

Garuett . .39

Ft. Scott . .32

Gt. Bend . .63

Leavenworth . .20

Beloit . .49

Parsons . .32

Wichita . .55

Newton . .51

Topeka . .30

Manhattan . .38

Emporia . .43

Winfield . .60

Oberlin . .66

Dodge City . .51

Garden City . .65

Olathe . .32

KENTUCKY.

Louisville . .42

Madisonville . .48

Hopkinsville . .44

Gracey . .44

Hematite . .47

Greebrier . .49

Beatrice . .42

Owensburg . .32

Russellville . .50

Bowling Green . .51

Lexington . .50

Lembanon . .50

Pembroke . .49

Paducah . .55

Owensville . .55

Hickman . .55

Henderson . .52

Cynthiana . .52

Ashland . .52

LOUISIANA.

Shreveport . .98

Pearl River . .106

New Orleans . .92

MARYLAND.

Baltimore . .59

Cumberland . .59

MICHIGAN.

Jackson . .54

Adrian . .48

Bay City . .48

Detroit . .48

Grand Rapids . .48

Kalamazoo . .48

Lansing . .48

Ann Arbor . .48

Brown City . .48

Chippewa . .53

Emmett . .49

Manisteeque . .57

Cadillac . .52

MINNESOTA.

St. Charles . .32

Rochester . .32

Waukeka . .32

St. Paul . .32

Blue Earth . .32

Fairmont . .32

Fairbault . .32

Duluth . .32

Corinth . .95

Tupelo . .97

Aberdeen . .1.01

Meridan . .97

Okolona . .1.00

Artesia . .1.01

Starkville . .1.01

MISSISSIPPI.

St. Charles . .32

Rochester . .32

Waukeka . .32

St. Paul . .32

Blue Earth . .32

Fairmont . .32

Fairbault . .32

Duluth . .32

Corinth . .95

Tupelo . .97

Aberdeen . .1.01

Meridan . .97

Okolona . .1.00

Artesia . .1.01

Starkville . .1.01

MISSOURI.

Delta . \$0.52

Dexter . .62

New Madrid . .56

Malden . .65

Carrollton . .20

Cameron . .20

Kansas City . .20

Laclede . .27

Maywood . .15

Napier . .27

St. Joseph . .15

Osborn . .20

St. Louis . .27

Hannibal . .27

Brunswick . .20

Boonville . .40

Moberly . .27

Kirksville . .27

West Plains . .47

Maryville . .15

Higginsville . .15

Neosho . .45

Eve . .45

MONTANA.

Miles City . .1.48

Livingston . .1.59

Butte . .1.63

Helena . .1.63

MASSACHUSETTS.

Fall River . .65

Springfield . .65

Worcester . .65

Boston . .65

NEBRASKA.

Chester . .37

Culbertson . .63

Columbus . .30

Alliance . .74

Beatrice . .32

Ashland . .21

Broken Bow . .56

Edgar . .39

Fairmont . .34

Grand Island . .39

Holdredge . .54

Hastings . .39

Kearyne . .46

Lincoln . .24

Omaha . .15

Norfolk . .32

Superior . .40

Tecumseh . .27

Wymore . .32

York . .34

Freemont . .24

NEW YORK.

Rochester . .58

Churchville . .58

Syracuse . .61

Utica . .63

Rotterdam Jct. .64

Cornwall . .66

New York City . .66

Mohawk . .63

Troy . .60

Buffalo . .49

Albany . .60

Poughkeepsie . .62

Binghampton . .61

N. CAROLINA.

Charlotte . .65

Fayetteville . .59

Washington . .65

Wilmington . .60

NORTH DAKOTA.

Fergus Falls . .55

Fargo . .59

Bismark . .81

Grand Forks . .65

OHIO.

Chillicothe . \$0.48

Cincinnati . .45

Cleveland . .47

Columbus . .45

Dayton . .42

Defiance . .44

Lima . .45

Portsmouth . .46

Toledo . .45

Xenia . .45

Youngstown . .48

Eldorado . .42

Newark . .47

East Mandale . .50

Versailles . .52

Pickway . .53

Washington . .60

C. H. . .60

Bluffton . .44

Irontou . .42

Savona . .42

Canton . .47

Zanesville . .48

Sandusky . .46

Akron . .47

Troy . .48

OKLAHOMA.

Vinita . .56

Wagoner . .65

Muskogee . .66

McAllister . .75

Bartlesville . .56

Osage . .66

Tupelo . .96

Guthrie . .32

Atoka . .96

Oklahoma City . .82

Tulsa . .66

Okmulgee . .72

Chickasha . .82

Enid . .82

Hugo . .109

Howe . .82

OREGON.

Portland . .140

Salem . .205

PENNSYLVANIA.

Pittsburg . .50

Johstown . .54

Weverton . .59

Philadelphia . .60

Bedford . .59

Erie . .50

Gettysburg . .59

Scranton . .60

Blairsville . .59

Lewisburg . .59

RHODE ISLAND.

Providence . .65

Woonsocket . .65

SOUTH DAKOTA.

Aberdeen . .56

Armour . .49

Canton . .52

Gettysburg . .60

Chamberlain . .55

Vermillion . .59

Yankton . .39

Sioux Falls . .39

Huron . .48

Watertown . .45

Pierre . .60

Deadwood . .1.32

Radic City . .1.28

TENNESSEE.

Princeton Jct. .47

Pond . .51

Bear Springs . .45

Tenn. Ridge . .51

TEXAS.

Dennison . .135

St. Joe . .115

Minneota . .115

Dallas . .115

Denton . .115

Ft. Scott . .115

Hillsboro . .125

Temple . .122

Georgetown . .122

Austin . .122

San Antonio . .125

Galveston . .122

Fayetteville . .122

Houston . .122

Cisco . .122

Henrietta . .122

Brownwood . .115

Waco . .122

Harris . .115

Corsicana . .115

San Angelo . .115

Abeline . .115

Amarillo . .122

Dublin . .122

Pallinger . .115

Paris . .115

Stevensville . .115

Beaumont . .122

UTAH.

Ogden . .155

Salt Lake City . .155

Manti . .170

Bingham . .155

VIRGINIA.

Abingdon . .67

Lynchburg . .59

Richmond . .59

Clarksburg . .67

Virginia City . .55

WEST VIRGINIA.

Clarksburg . .51

Richmond . .59

Grafton . .52

Deer Park . .59

Parkersburg . .50

WISCONSIN.

Beloit . .32

Madison . .32

Chippewa Falls . .47

Prairie Du Chien . .32

La Crosse . .32

Manitowoc . .32

Milwaukee . .32

Wausau . .32

WYOMING.

Cheyenne . .75

Evanston . .155

Rawlins . .155

Laramie . .155

Wheatland . .170

WASHINGTON.

Tacoma . .2.61

Spokane . .2.46

Pasco . .2.64

Seattle . .2.64

MILAN.

Nashville . \$0.45

Memphis . .39

Gallatin . .50

Hartsville . .51

Frankfort . .48

Maysville . .49

Paris . .54

Union City . .74

Jackson . .89

KING CORN

CORN is indeed King. It is the greatest money crop the world has ever known. The United States not only leads all other countries, but produces three-fourths of all the corn that is grown in all parts of the world combined. The government estimate of the crop made Nov. 1, 1914, was two billion, seven hundred and six million bushels, indicating a total value for the crop of one billion, eight hundred and eighty-two thousand dollars, Iowa leading as the chief corn producing state with three hundred eighty-nine million bushels, seventy-four million bushels more than Illinois, its nearest competitor. (Iowa also leading all other states in the production of oats, by twenty-seven million bushels more than Illinois, the next highest in the production of oats.)

Corn employs more people and contributes more to the wealth of this country than any other cereal—more than cotton, wheat and oats combined. To haul Iowa's vast corn crop of 1914 to market it would have taken 389,000 freight cars, each 40 feet long and holding 1,000 bushels. There are 132 cars in a train a mile long, therefore it would take a train of cars 2,950 miles long to haul the corn grown in Iowa. That would mean a train extending from Cleveland, Ohio, to San Francisco. It would take 7,780,000 wagons, each holding 50 bushels, to deliver this corn to the grain elevators. If each wagon and team occupied 20 feet it would make a train of vehicles 29,474 miles long. It is 25,000 miles around the world, therefore this wagon train would encircle this old earth ONE TIME with 4,000 miles besides. Some idea of the wonderful yield of corn in Iowa can be Feister-Owen Press—VolkmNov 17

Although diverging from what we intended to say about corn, we will mention some other facts about Iowa and its farmers. The state is seventy-six years old. It has a population of 2,225,000; there are 19,000,000 acres on which grain is grown; total number of farms in state, 225,000; live stock worth \$393,482,000; ranks first in number of hogs, 7,000,000, valued at \$110,000,000; stands second to Texas in cattle, valued at \$90,000,000; on horses it leads all other states; the value of poultry is over \$30,000,000; its dairy products are \$53,000,000, and milch cows themselves, \$67,000,000; one-fourth of the world's supply of canned corn comes from Iowa; over 125,000 people in Iowa own their own farms; average wages paid farm hands, \$30.00 per month with board; state savings banks show increased deposit of \$25,000,000 per year. Some examples of the fertility of soil: Fifty acres in potatoes cleared \$3,000; pop corn, \$76.00 per acre; 600 tons of alfalfa hay off 150 acres. These are a few things that corn and diversity of farming has done for the people and to make Iowa the only billion dollar state in the union on her products.

To increase the corn crop is to increase prosperity all along the line. To improve it is to contribute to the general welfare—laudable undertakings, most assuredly. To give our experience in the improvement of corn would be like writing a history of our life. Long ago, most fifty years ago, I became convinced that farmers could through careful selection and by planting only the best and most select varieties of corn almost, if not quite, double the yield and product of their farms, and as it were, thus "make two blades of grass grow where but one grew before." Possessed of this conviction I spared no effort to obtain the best and most improved varieties to be found, without regard to cost of seed; cost being an absolute insignificant item, since one bushel of seed corn plants from six to eight acres of land, and when compared with the increased yield and results of the crop, whether ten, forty or four hundred acres which latter amount I had often grown. Thus embued we became one of the first, if not the first in Iowa, to agitate the improvement and the growing of "more corn." Influenced by reason of this we became the originators of commercial corn breeding on a large scale and in 1884 began the seed corn business, "blazing the way" at every angle. Since then we have had many followers and have always welcomed them on the way, but it remains a well known fact that the Ratekin's were the pioneers and leaders. We feel that we know both the theoretical and practical methods of corn growing and breeding, and we practice what we preach; grow and breed the best high yielding varieties to be found.

The Best Seed a Necessity

With good soil and proper weather conditions the essentials of corn growing may be considered under these heads: "Selection and Care of Seed," "Preparation of the Seed Bed," "Cultivation of the Growing Crop."

These were the essentials in Puritan times. They are the essentials today. The difference lies in their application. Some yet believe that any seed is good enough, that any sort of a seed bed will do and that any kind of cultivation will answer.

Landseer, the great English painter, on being asked, "How do you mix your paints so true to nature?" replied, "With brains, sir." The successful farmers of today are applying the same rule to corn growing. With brains and improved methods they are doing the right thing at the right time in the right way, and these things spell success.

Corn Growing

That the best crops are grown from the best seed, everyone believes. Yet how indifferent in practice are some of us to the necessity of securing the best seed corn for our own use, an indifference that is probably the most costly of all our faults.

It is a common thing to see a hill of corn producing a splendid ear, a scrub and a nubbin. Why this difference? Each stalk had the same soil, the same care, the same sunshine. Why were they not all splendid ears? We must look to the seed for the answer. Seek the parents of the three kernels planted and the cause of the wide difference will appear. The seed is but the female part. Field gathered seed contains many kernels fertilized by the pollen of scrub stock. These will as surely reproduce themselves as worthless animals beget their own kind. We might as well expect to get a fresh colt from a scrub sire as to get perfect seed corn, when no attention is paid to the kind of stalks furnishing the pollen that fertilizes the seed..

Some ears will produce a yield of 100 bushels per acre, others only 20 bushels. Some ears will produce many barren stalks, others, none. Some show a greater tendency to throw out suckers than others. Crossing these worthless strains with the first, as is true of much field gathered seed, cannot produce the best seed corn. It may be good, good enough for some people, but it is not the best.

SEED CORN

IT PAYS TO PLANT GOOD THOROUGHbred VARIETIES OF SEED CORN

Prof. P. G. Holden of the Iowa State Agricultural College at Ames, Iowa, now agricultural commissioner with the International Harvester Company of America, says: "I went to the corn field of one hundred farmers in Storey County, Iowa, where the State Agricultural College is located, and where the farmers were in their fields planting corn, and took a quantity of seed corn, such as they were planting, from one hundred different corn planter boxes, and took it to the grounds of the State Experimental Station of the Agricultural College, and planted it on our trial fields. Some of it made only twenty bushels, while other lots yielded almost one hundred bushels per acre. This wide difference was all in the seed and varieties. The land and cultivation and other methods all being identically alike. The expense of growing was the same. The best seed and varieties produced fully four times as much corn of better quality than did the other lots of inferior seed."

REMEMBER—In Counting the Cost of Seed Corn

One bushel of corn will plant seven to eight acres! The cost per acre for our pure bred varieties is but 40 to 50 cents per acre! Only one bushel per acre increased yield more than pays all cost of seed. The commonest mongrel scrub corn costs you something. The corn we grow and sell you is not only selected seed, but is pure bred and has been carefully handled, dried and cured as seed corn should be, and will grow and give you a yield of 10 to 40 bushels per acre more than ordinary varieties.

A bushel of seed corn that increases your yield ten bushels per acre, makes you at the rate of \$50 to \$75 per bushel. Hence, don't forget that if you plant seed that lowers your yield this much or more it has cost you at least above its cost \$50.00 per bushel in the result of your crop.

The Seed Bed Whether in the garden or in the field, the seed bed must be thoroughly prepared to produce the greatest yield. A "good enough" seed bed may do for some, but at the best it can only yield a fair crop. Too often it means a poor stand, an uneven growth and a foul field. No crop grown on the farm suffers more from being planted in a poorly prepared seed bed than does corn, and no crop is more responsive to the effects of a good seed bed than this king of farm crops.

Fall Plowing Fall plowing usually produces a better corn crop than spring plowing, the ground being mellowed by the frost and rain. Then, too, it is more economical, for it can be done when both men and teams are not so busy, and one can plant on fall plowing earlier, a most important consideration.

Spring Plowing A good workman will leave his field as nearly level as possible. Spring plowing is often robbed of half its value by being left to dry and bake just as it is turned. The best farmers have learned that it is a much better plan to pulverize each half day's plowing before leaving the field. This leaves a level field, well pulverized surface that absorbs the heat and retains the soil moisture.

Corn Cultivation The best method of corn cultivation is a question that has been much discussed during the past few years and while some corn growers strongly advocate shallow or surface cultivation, there are those that still adhere to deep plowing and ridging of the corn row. We, however, believe the different methods depend very much on weather conditions, wet or dry, but about all agree upon the use of the harrow about the time or just before the corn begins to peep through the top of the ground, after that at the first plowing and just when you can fairly see the rows, is to plow deep and as close to the corn as possible without covering it up, with "bull tongue" shovels on your cultivator, after which use a surface cultivator, or six small shovel cultivators, scratching the top of the ground only two or three inches deep. The J. D. Townner & Sons Co. of Mendota, Ill., manufacture a line of implements for surface cultivation that are perhaps among the best in use for surface cultivation of corn, and they will gladly mail you a copy of their book, "A Treatise on Modern Corn Culture," if you will write them for a copy.

Corn has no tap root, but like the grasses sends out a multitude of long, slender roots a few inches below the surface. These small tender roots are the sole support of the plant until the corn is "laid by." They must collect the food-bearing moisture from the soil and deliver it to the stalk. Any method of corn culture that injures, prunes or even disturbs these feeding roots, robs it of the necessary moisture, decreases the vitality of the plant, and lessens the yield.

Because the brace roots penetrate the soil to a depth of several feet, many think the feeding roots do also. No more mistaken impression could be had. An examination of corn roots in the field during the cultivating season will show that the feeding roots lie nearly parallel with the surface and but a few inches below it. The brace roots do not appear until the corn is laid by, hence no system of cultivation can help or harm them, but such is not the case with the feeding roots.

Any rational method of cultivating corn must be based primarily upon the three underlying principles: To Kill the Weeds, that the corn may not be robbed of its food and the necessary air and sunshine. To Preserve the Corn Roots, that they may do their work of collecting plant food undisturbed. To Prevent the Evaporation of soil Moisture, that the growing plant may always have plenty of food in liquid form near the surface, where it naturally seeks it.

Every tiller of the soil knows the necessity of observing the first, and does his best to destroy the weeds.

The Man With the Hoe is conceded by all to be the most thorough method of cultivating. He did not dig down and cut off the roots which extend in every direction, but he cut off the weeds, killing them, and threw the fine dirt toward the hill. Thus the long fine roots were left to furnish the plant with nourishment and the weeds, soil robbers, were destroyed.

What is Good Seed Corn? Method of Growing--Handling

To Be First Class Seed Corn

It should be a standard variety of superior quality in yield—early and sound maturity—corn that has demonstrated its ability to out-yield other strains of the same variety. It shows a high percentage of germination, thus insuring an even and perfect stand. It should be purchased from a practical and scientific corn breeder, one who possesses a knowledge and experience in the growing and judging, as well as the preparation of seed in all its details.

Thirty-two years have come and gone since we first begun the growing of thoroughbred seed corn as a business. Years before, however, as a practical farmer and corn grower, we learned there was as much, even ten times more profit for the time and money invested and spent in the selection of thoroughbred seed corn as there was in selecting a herd of thoroughbred horses, cattle or hogs to start from, besides the returns are immediate from your corn crop, while it takes two, three or four years' time, care and patience before returns begin to come back from your thoroughbred herd, and even then in a comparatively small way as measured by your annually increased yield of corn from your acres during the years of waiting.

Forty Years of Breeding; Thirty-two Years in the Seed Corn Business

We realize that by far the most important question that presents itself and comes before the farmer each year is his seed corn. Since we blazed the way in the improvement and breeding corn for seed, and actually grow and sell more seed corn, perhaps, than any ten seed corn growers or seed houses combined in the state of Iowa, we feel it proper to present at this time our thirty-second annual catalog, a summary of what we have accomplished along the lines of corn breeding and corn improvement during these years. To do this we have given a few photographic illustrations which will be found in the following pages. But more especially you want to know how our seed corn is grown and handled, of which we will try to tell you in a brief way.

Many years ago we adopted and established breeding plots from which to grow our Seed stock. At that time for the sole purpose of improving and increasing our yields from best and most select ears. Later we adopted ear row test plots. What the ear—two-row method reveals?

No two ears of corn are exactly alike, yet it is found that within varieties there exist certain strains or families. Breeding corn is simply carrying out nature's own methods, but in addition one must keep a record of each individual plant or set of plants resulting from certain ears. By selection we are enabled to increase certain desirable qualities and thus we bring about the tendency of each succeeding generation to become more uniform and fixed in its certainty to reproduce these qualities.

On planting the kernels of corn from a given mother-ear in a single row, that row of progeny will invariably have a certain degree of individuality throughout the season and show a contrast with other rows similarly planted. It may be that this particular row will germinate almost perfectly, out-grow the neighboring rows completely and at gathering time having ears of uniform size and few nubbins outyield all others in the field. Yet the selection of the original ears for planting may have been made with the greatest care to have them all as nearly uniform as possible. The treatment through the season for each row may be identically the same and the chances for any variation in fertility of the soil reduced to the minimum. The very next row of this vigorous and high-yielding row of corn may represent the opposite extreme and poor germination. Previous to the time of pollination all tassels of weak and undesirable stalks are removed to prevent the pollen from the inferior stalks to fertilize the more vigorous plants. In this way, and only in this way, is it possible to attain the best results in breeding corn.

The all-essential point in which the farmer is most interested. The score card, the corn shows and the competitive corn judging are all good and have their place in awakening the interest to better and more profitable corn raising but the commercial corn breeder should not allow himself to become too greatly absorbed in ideal ears, unless these can show for themselves by authenticated records prepotent powers of reproduction. Dr. H. J. Webber, of Cornell University, advises in plant breeding to stick closely to the important characteristics and not to give weight to features not of practical value. Apparent but slight deformities will eventually take care of themselves, or may be improved. Personal experience has abundantly proven this to us, for some of our highest yielding strains of corn today are anything but ideal ears from the standpoint of the score card.

How We Grow Seed Corn

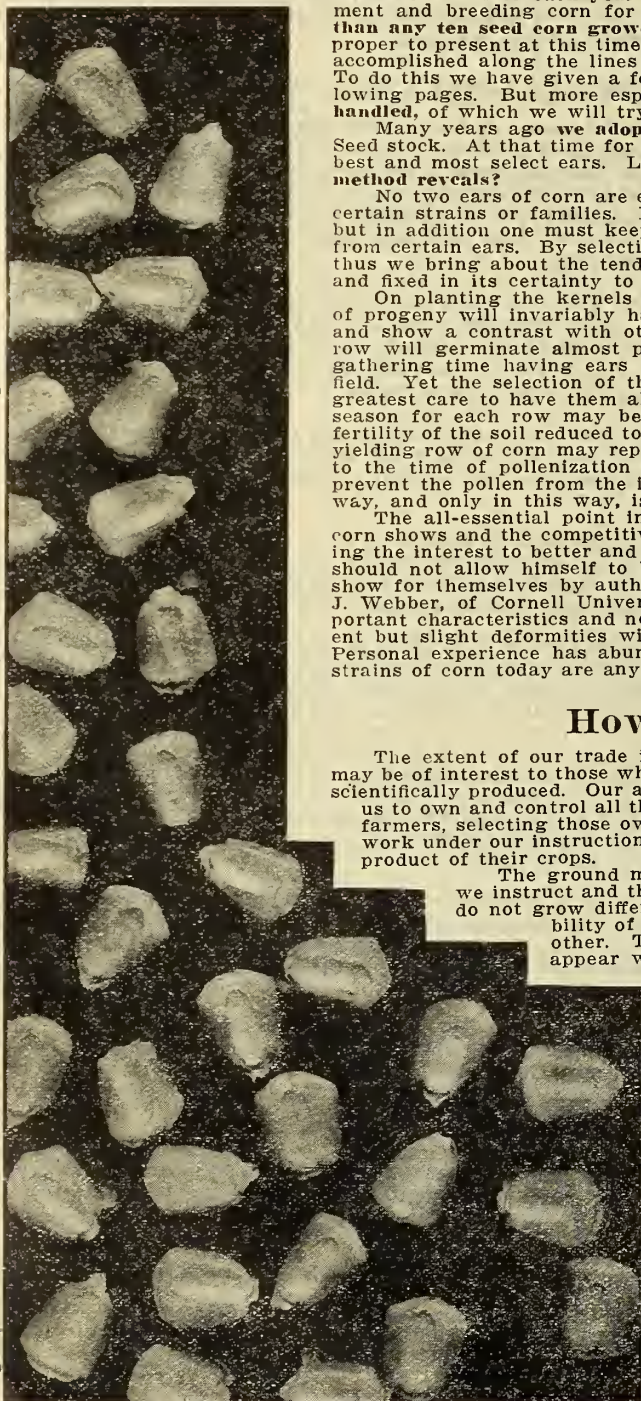
The extent of our trade in seed corn has reached such enormous proportions that it may be of interest to those who purchase from us to know how large quantities of seed are scientifically produced. Our acreage is so large that it would be manifestly impossible for us to own and control all the land necessary. We make contracts with the most reliable farmers, selecting those owning good farms which are properly handled; men who will work under our instructions and pay them a liberal premium over market prices for the product of their crops.

The ground must be properly prepared, must be plowed and harrowed as we instruct and the seed which we furnish, planted in the proper manner. We do not grow different varieties of seed corn close together, thus avoiding liability of mixing by the wind carrying the pollen from one field to the other. The corn is frequently cultivated and as soon as the tassels appear we send men into the field to remove same from all barren stalks. This will produce seed which has a tendency to large yields and the production of ears on every stalk. This work also prevents the condition which is too often seen in a field of corn, that is, a hill with two or three non-productive stalks. A graphic illustration of this point is outlined elsewhere on this page.

When the corn is properly matured, it is harvested under our direction and placed in cribs which contain air shafts and ventilators, and all corn exposed to the air so as to thoroughly cure under normal conditions. Before the arrival of freezing weather the corn is taken into our warehouse where the curing process is completed. Before we receive the corn it is sorted twice; once when it is husked and again when it is delivered to us. A third sorting is afterwards made before the corn is shelled. This insures the very best corn produced on each field. This selection is so thoroughly done that we save on an average only ten to fifteen bushels to the acre for seed.

After the corn is shelled, it is thoroughly recleaned, screened and graded by our machinery. Every lot is then tested for germination and no seed corn is allowed to leave our hands which does not show a satisfactory test.

Briefly summed up; we have the finest soil and climatic conditions for growing seed corn, with the best facilities for handling, making for highest quality and heaviest yields of any spot to be found in the world.



DIAMOND JOE'S BIG WHITE

The World's Greatest Yielding White Corn

LARGEST EARED, EARLY MATURING CORN KNOWN OR GROWN



Above is a True Photograph of Select Ears; Diamond Joe's Big White

Grown, Selected, Cured, Graded and Tested by Ratekin's Seed House

The Big White Corn that Has Captivated the Entire Corn World. (Originated and Introduced by Ratekin's Seed House in 1905)



Diamond Joe's Big White

Landed First Prize, \$100 in Gold to A. W. Butler, of Plymouth County, Mass., 133 Bushels

Mr. A. Webster Butler of Plymouth County, Mass., is an ambitious up-to-date progressive New England farmer as well as a firm believer in ideals. He first began purchasing his seeds from the **Ratekin Seed House** ten years ago, and has been a continuous customer each year from the first. Since he began planting seeds from the **Ratekin Seed House**, he has won many notable premiums and prizes. Following this, below will be found copies of two of the numerous letters we have received from him which speak for themselves. The seeds we have sent to Mr. Webster were always the same as we send to all our mail order customers.

\$100 in Gold; 133 Bushels It may be of interest to you to know that I won first prize, \$100.00 in gold, at the corn show of all the New England States for the production of the largest yield per acre of sound, well matured Dent Corn. This prize was awarded me on my crop grown from the **Diamond Joe's Big White** corn I got from you, and which made an average yield of 133 bushels shelled corn per acre on my farm in **Plymouth County, Mass.** If you have a big yellow corn as early as **Diamond Joe's Big White**, I want to try it. Send me a copy of your new catalogue as soon as ready for mailing.

133 Bushels Ratekin's Seed House, Shenandoah, Iowa. Very truly yours, A. WEBSTER BUTLER. Plymouth County, Mass., Jan. 12, 1914. Year. I planted the seeds I ordered and received from you last year, with the best of results. The Fertilizing Company did not give a prize on corn this year, but gave a cash prize on seed Potatoes, and as a result I was awarded a cash prize of \$100.00 in Gold on a yield of 363 bushels to the acre. I planted your **Diamond Joe's** seed corn, and from it I filled a 76 ton silo, more than half full, and made a good allowance for settling. I think there must have been 38 to 40 tons, and it was the very best I ever put into a silo. From my record of 1909 I grew 36 bushels of Flint corn to the acre, valued at \$1.00; 1910 I grew 133 bushels of **Diamond Joe's Big White**, valued at \$1.00 per bushel, and 1911, 133 1-3 bushels, valued at \$1.00, and in 1912 I obtained 381 bushels of Mangel Wurtzel Beets from one-fourth acre. Again wishing you every good wish, I am,

Remarkable Yields Ratekin's Seed House: Dear Sir: Replying to your letter of recent date in regard to the seed corn bought from you last spring, would say, I got six bushels **Diamond Joe's Big White**, six bushels **Wallace's Favorite** and three bushels your **Iowa Silver Mine**. It came up quickly, grew off faster, done better and come to maturity a month ahead of our native sorts. I have been growing corn here for the past sixteen years. I am not able to tell you the yield, but it made remarkable big yields. **Diamond Joe's Big White** taking the lead. It is the earliest big eared corn by far I have ever seen, but the **Iowa Silver Mine** chased close after it. I shall want a lot of seeds the coming season, and will remember you with my orders when ready to send for them. Very truly yours, DOMINECK PITTARI. Jefferson Parish, La., Aug. 20.

207 Bushels Farmers and others have been attracted by the exhibition of corn that has been in the window at Dille's store for some time. It was grown by J. W. Dale, and two acres produced 207 bushels and 50 pounds, which is perhaps the largest yield of corn ever known in this community. Mr. Dale says the moles took many of the seed, and but for this fact the yield would have been even better. In gathering the corn great care was taken to keep the top and bottom ears, main crop, sucker ears and nubbins separate. The choicest of the main crop Mr. Dale will save for seed.

The corn is white, long even ears, and is known as "**Ratekin's Diamond Joe**." Two hundred and fifty pounds of fertilizer was used to the acre. The ground was in good order for planting, but no extra work was done in the way of cultivation.—Mitchell Tribune, Indiana.

89.6 Bushels It gives me pleasure to report the yield of seed corn donated by you last year as follows: The **Diamond Joe's Big White** yielded 89.6 bushels per acre; **Queen of Nishna** yielded 74.2 bushels. Both of these varieties of corn are good yielders here, yielding also a large quantity of fodder per acre. Very truly, J. C. HOGENSON, Agronomist. Baltimore City, Md., Jan. 8.

200 Bushels I have planted your seed corn since 1907, and I am now raising 200 bushels of corn per acre. Please send me your catalogue, so that I can select what seed I want for the coming season. Thanking you in advance for this favor, I am,

First Prize You will no doubt be pleased to know that I took first prize at our recent fair and corn show with **Diamond Joe's Big White** Corn from seed I sent to you for. The prize ear measures 15 inches in length. Pretty good corn for Oregon, isn't it? Truly yours, JESSIE DeHOFF. Cove, Union County, Oregon, Jan. 27.

Very truly yours, J. M. RUNDALL.

Ratekin's Diamond Joe's Big Early White

Has Captivated the Entire Corn World
THE EARLIEST MATURING BIG EARED
CORN KNOWN OR GROWN

Droughtproof resists drought and scorching heat better than any other variety.

Diamond Joe's Big Early White was originated by the Ratekin Seed House, and was first introduced by us in 1905 since which time it has become well and favorably known in all sections of the country, having been thoroughly tested and tried out in every state in the Union. Everywhere north, south, east and west, it has proven a wonderful success, a sure cropper and an enormous yielder, maturing early and soundly, as early as the earliest and outyielding any of them more than two to one, in fact has a record of over 200 bushels shelled corn to the acre and a record in hundreds of instances of over 100 bushels per acre.

Droughtproof

In the great drought stricken districts of Nebraska, Kansas, Missouri, Oklahoma, Arkansas, Texas and other localities, during the corn growing season of 1913, where we sold and shipped thousands of bushels of this seed corn, it withstood and resisted the drought, scorching heat and hot winds better than any other variety, and in many places made yields of 30-40-50 and 60 bushels per acre where other sorts did not yield five bushels per acre, or was a total failure. This corn has made like and corresponding yields, everywhere, when seasons were good and were bad, and all who have been fortunate enough to plant it have won a prize by doubling their yields. In fact it would almost make one gasp with astonishment to see and read the hundreds of letters and reports we have received from farmers who have planted and grown crops from this corn—many of them are almost unbelievable, but run so uniformly alike they are undisputable.

Description

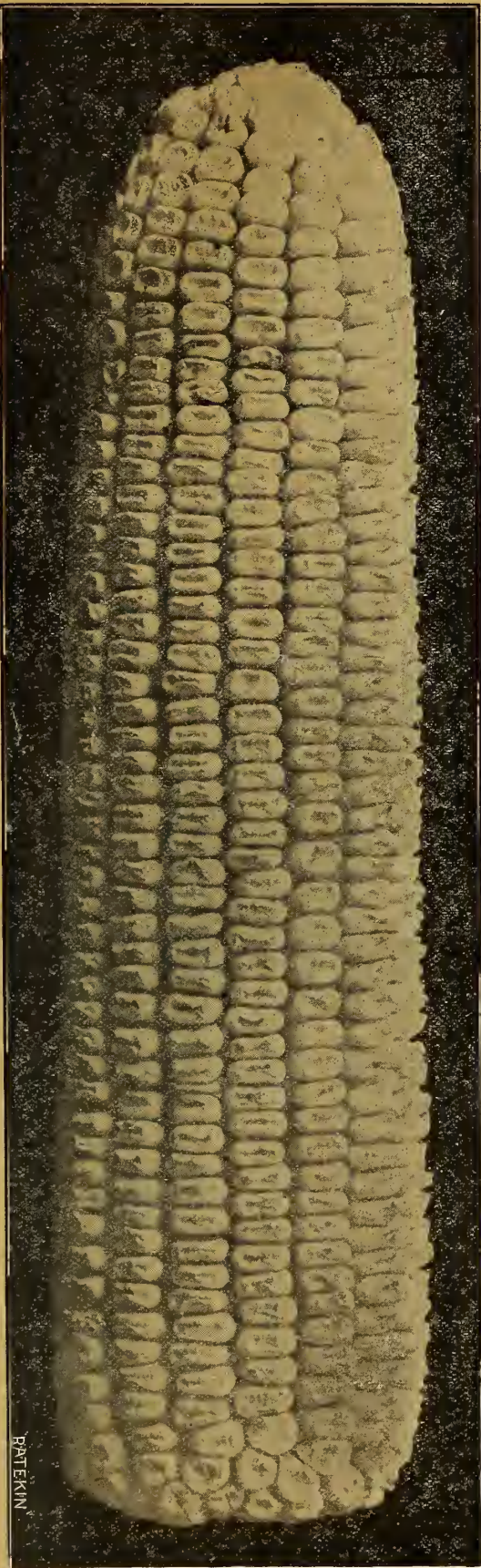
The accompanying illustration on this page is a very true picture, made from a photograph of this corn, showing its type and character. From the name we gave this variety of corn some people may draw the impression that it is a large jumbo-overgrown variety, but it is not. It, however, is a large eared corn, running somewhat larger in size than Iowa Silver Mine, is pure bred and every stalk producing one and two, and sometimes three good ears, and this is where it's large, heavy yields come in. The stalks are large, strong and robust, growing to a height of 8 to 12 feet, dependent upon land, upland or bottom land, has a very heavy extensive root system and this is where its vitality to resist drought and parching hot weather comes in; the roots being almost equal to sorghum and Kaffir Corn. Medium ears run from 8-10-11 and some 12 inches long and over, but usually about 10 inches, 16 to 20 rows, deep kernels, solidly set on cob of medium size. In short, this corn was bred with an eye single to heavy yields and early maturity and not for show purposes, but all around general crop purposes. There is no variety that will do better or equal it on old, poor or hill ground, and at same time there is no variety grown that will yield more bushels of good sound corn on strong rich corn land. Briefly stated it is the embodiment of all the good qualities contained in all the best varieties, it's the sure thing. Our seed stock of this corn is exceptionally fine this year (extra choice) absolutely pure stock and we hope to be able to fill every order that comes to us, large or small.

Diamond Joe's Big White is a superior variety of corn from every point of view. If you are looking for the corn that will make you the most bushels and the most money, stop right now and order enough to plant your entire crop. It's the corn that will do it. Plant Diamond Joe's Corn on good land and do your part and it will make you 100 bushels per acre.

Points of Supremacy Over Other Varieties

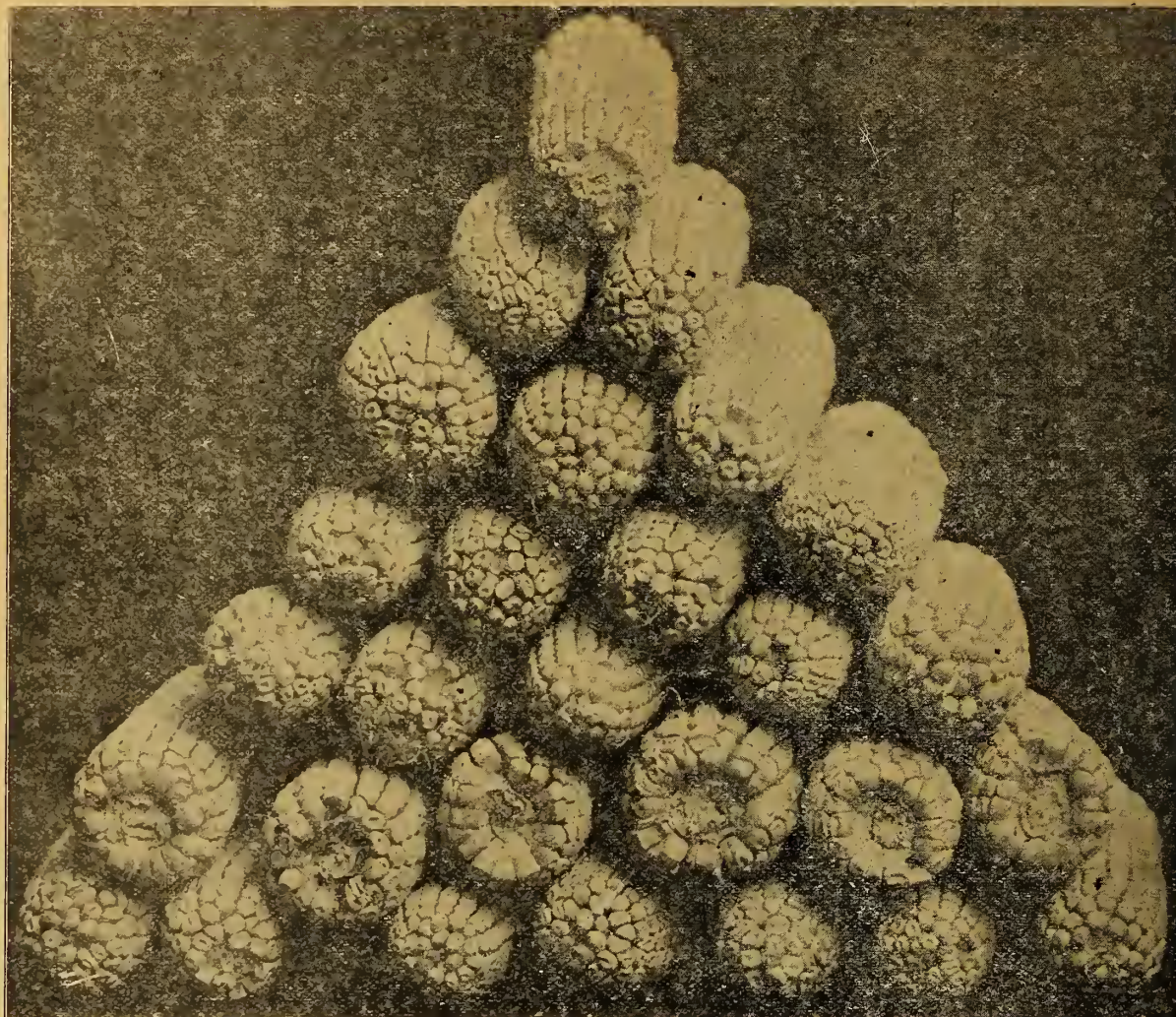
1. It is pure and a distinct variety.
2. It is a strong, vigorous, robust grower from the start.
3. It is absolutely free from barren stalks, every stalk bearing one or more well developed ears.
4. It is very early to mature, making itself everywhere in 100 days or less.
5. It will thrive and do well in extreme drouth, when other varieties fail.
6. "Diamond Joe's Big White" is a superior variety of corn from every point of view. If you are looking for the corn that will make you the most bushels and the most money, stop right now and order enough to plant your entire crop. It's the corn that will do it.

Prices: Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25; pk., 90c; ½ bu., \$1.75; 1 bu., \$3.50; 2 bu., \$3.40; 10 bu. at \$3.25 per bu. Bags included, f. o. b. Shenandoah. If wanted in ear or box, add 75c per bushel to foregoing prices; 5 bu at 10 bu. prices.



Diamond Joe's Big White; Droughtproof.

Iowa Silver Mine Corn, The World-Wide Favorite Variety



THE GREATEST RECORD OF ANY WHITE CORN IN THE WORLD

Ratekin's Pure Genuine Iowa Silver Mine Corn

Famous corn; best corn; more widely known and planted than any corn in the world; has greatest record of any corn on earth. It's an early maturing corn. It is a corn for the north, south, east and west; it gladdens the farmer's heart at harvest time; makes good where other sorts fail. It brings prosperity to the man who plants it.

We have been growing and improving this variety of white corn for eighteen years—made it our leader prior to introducing Diamond Joe's Big White—have sold and sent out approximately 500,000 bushels of seed to all parts of this country, including every state in the Union; also to many foreign countries—Central Europe, South Africa, Austria, Philippine Islands, New Zealand, Argentina and South America, and everywhere it has given a good account of itself. It is adapted to a wider range of conditions than any variety of corn grown. It has shown the greatest prize record for yield at county, district and state fairs, corn shows and farmers' institutes of any variety in the world. Possibly others have won premiums over it in exhibitions of ears, but this was in the skill and judgment of the exhibitor in the selecting of ears that conformed nearest to the score card upon which points were judged, but such prizes and awards amount to nothing. It's the big bushels the farmer wants for feeding and market purposes.

"Ratekin's Genuine Iowa Silver Mine" is noted for its great vitality to withstand and resist extreme conditions of weather, wet or dry; also hot weather, and makes good crops where other sorts wither, burn up and perish under hot winds and scorching sunshine. Each year we have grown this corn we have sought to select and improve it in every way possible, not so much to increase the size of the ears, but to increase uniformity of size and number of ears to the stalk and have thus eliminated all barren stalks, and brought it up to the highest standard of perfection, both in yield and early maturity.

There is scarcely a township or neighborhood anywhere that corn is grown but what some of your neighbors can tell you about **"Ratekin's Iowa Silver Mine"** and the splendid results obtained from it. In view of this we do not deem it necessary, if space would permit, to print even a partial list of the thousands of testimonials we have received pertaining to this corn.

"Ratekin's Iowa Silver Mine" Corn is not a new variety, but is one of the best known sorts, and on account of its great popularity and the wonderful record it has made there are thousands of bushels of mongrel white corn offered and sold every year under the name of Iowa Silver Mine that is no kin to **Ratekin's pure bred stock**, and is incomparable in every quality with **Ratekin's genuine stock** that has been kept pure and bred up and improved from year to year.

(See next page for description, page 11.)

215 Bushels Prize
Winner Everywhere

IOWA SILVER MINE—Continued

The Greatest Record of any White Corn in the World

Ratekin's Iowa Silver Mine is Genuine Stock, Uniform and Thoroughbred

Drought-proof is drouth proof and being of extreme vitality, will do better on old, poor or hill land than any other varieties of either white or yellow corn. We offer this corn to the farmer as one of the best for feeding yield, early maturity and for ensilage purposes. In the southern states, where we have sent thousands of bushels during the past fifteen years, it has proven the salvation to the country, and where we were selling only a few bushels here and there fifteen years ago we are now selling in carload lots to seed houses and dealers all over Oklahoma, Arkansas, Texas, Louisiana, Mississippi, Tennessee, Kentucky, Alabama and Georgia.

Description: Stalk—Medium in height, ranging from seven to ten feet high (dependent upon the land, hill or bottom ground); very leafy broad blades and a lot of them. The type of corn is very even and uniform; ears run 8 to 12 inches, average about 10 inches long, 16 to 20 rows, pure white kernels, solidly set on a medium small cob, ears well filled out at butt and tip. The cob being small, it dries out rapidly while the corn is ripening. Thus it is ready for feeding and marketing earlier than other varieties. It is a wonderful drouth resister, and stands the hot climate in the south, where they are affected with these difficulties, better than native sorts. In addition our seed corn when planted in the south—Oklahoma, Arkansas, Texas, Louisiana, Mississippi, Tennessee, Kentucky, Alabama, Georgia, Virginia, North and South Carolina—ripens fully three to four weeks earlier than native sorts, thus cutting off that much time in the most critical period in making a corn crop, besides it comes into feeding and milling purposes that much earlier. In short, our pure bred seed corn can be planted anywhere with absolute assurance of early maturity and an increased yield of from ten to forty bushels per acre more than from ordinary varieties. Ratekin's Iowa Silver Mine matures in from ninety to one hundred days in good corn weather, anywhere.

Read Astonishing PRIZE RECORD: At one fair ten best ears took first prize, ten smaller ears second prize. Afterwards ten best took sweepstakes over both white and yellow. Total premiums \$95.00. Captured prize offered in 1896 for largest yield against all other sort, kind or color. In 1899 the Agricultural Society of Illinois offered three prizes for largest yield. Iowa Silver Mine was awarded all of them, 196, 176 and 154 bushels per acre. It has produced 215 bushels in Iowa, 211 in Indiana, 201 in Arkansas, 196 in Illinois, 145 in Nebraska, 144 in Ohio, 137 bushels per acre in Texas. It's the corn for everywhere. No other corn of any color can compare with it for productiveness. We can fully recommend it.

PRICE: Postage by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.25. By freight or express at purchaser's expense: peck, 90c; bu., \$3.00; 2 bu. or more at \$2.90; 10 bu. or more at \$2.75. 5 bu. at 10 bu. prices. Bags free. If wanted in ear, crated, add 75c per bu. to above prices.

Johnson County White

A Single Ear Has Won \$1000 in Prizes

This variety is a cross between Boone Co. White and Forsythe Favorite and was developed and introduced by L. B. Clore of Indiana, and has had 18 years of careful, painstaking and intelligent selection and breeding.

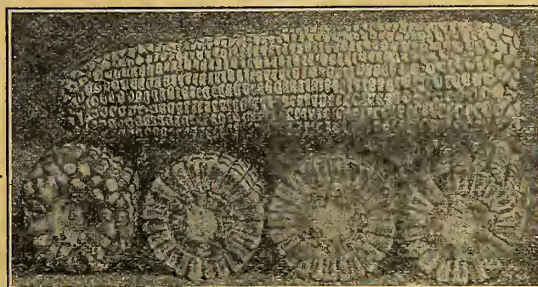
For the corn-growing belt, we are quite sure there is no White Corn grown today of greater merit. This Corn has become famous for yield and especially where one wishes to grow show stock.

The shape of the ear is cylindrical to within about 2 inches of the tip, then slightly tapering. Tips fill well over the end of the ears, covered with grains; the butts are well rounded out with a medium sized shank, kernels uniform wedge shaped, pure white, and white cob; ears average about 10 inches in length, with the circumference about three-fourths the length.

Of strong and vigorous habit of growth and well covered with broad blades—very valuable for ensilage. The length of season is about 130 days. This corn has been successfully grown as far north as Des Moines, Iowa, Peoria, Ill., Fort Wayne, Ind., or Marion, Ohio. We recommend it for the great corn-growing districts of Springfield, Ill., Terre Haute, Ind., and corn-growing latitudes of the south.

PRICE: Postpaid, by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant 1 acre), \$1.25. By freight or express at purchaser's expense, peck, 90c; bu., \$3.00; 2 bu. or more at \$2.85, 10 bu. or more at \$2.75. Bags free. If wanted in ear, crated, add 75c per bushel to above prices.

Big Boone County White



Ratekin's Genuine Boone County White.

Boone County White sometimes listed under the name of Boone County Special, is a highly bred variety of white corn of extra large size, containing a high percentage of oil. It is late maturing, but with good, long seasons and favorable conditions, it is a splendid yielder. In many places it is a great favorite. The ears are from 9 to 12 inches long, 7½ to 8½ inches in circumference, containing 18 to 24 rows, weighing from 12 to 18 ounces. The cob is medium large and pure white in color. The ears are quite uniform in size, shape and appearance. The kernels are pearl white, quite deep, with fine large germ. This variety grows a large stalk from 10 to 12 feet high, with an abundance of foliage, and like other white varieties, is the best for old, thin or poor soil. They gather more plant food from the air and less from the soil than does yellow corn. With favorable seasons in localities where it has plenty of time to mature, it is particularly valuable; say the southern half of Indiana, Illinois, Kansas, Missouri, and from there south to the Gulf Coast states. Matures fully in about 130 days. Our seed stock of this variety was grown from pure, genuine stock and can be relied upon to give the best possible results to be obtained from this variety.

PRICE: By mail, postpaid, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25. By freight or express, at purchaser's expense: Peck, 90c; bu., \$3.00; 2 bu. or more at \$2.85 per bu; 10 bu. at \$2.75; 5 bu. at 10 bu. prices. Bags free. If wanted in the ear, crated, add 75c per bu.

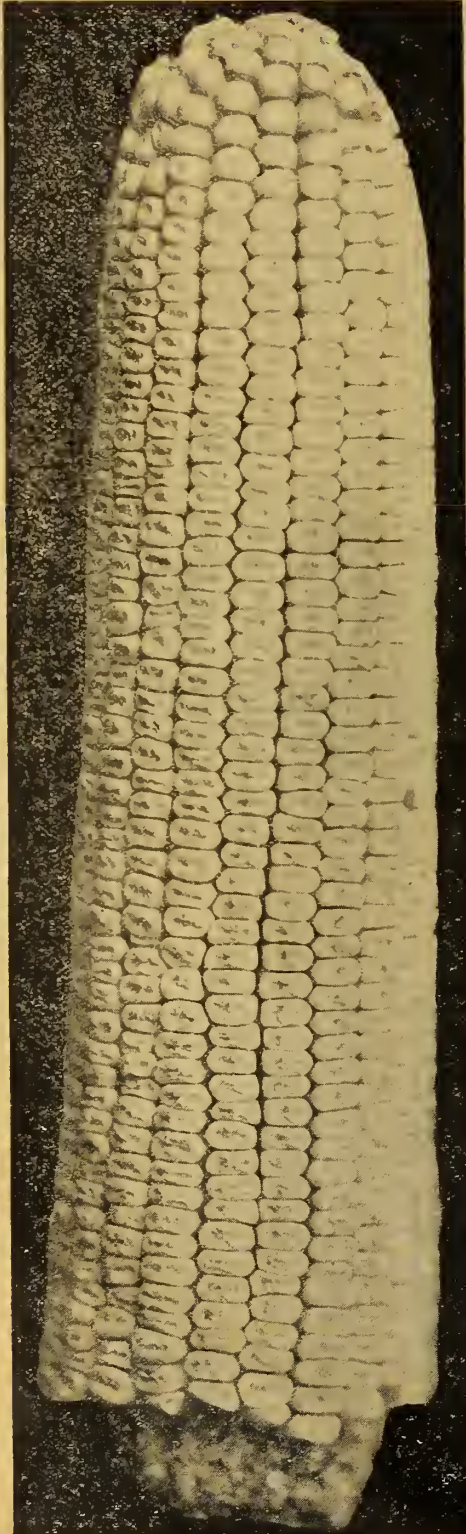
GRADED SEED CORN

We carefully grade all seed corn which we send out, removing the extreme tip and butt kernels so that it is readily planted with edge-dropping corn planters. But the grading is only a part of the labor which we give to the production of good seed corn. All varieties are carefully grown under the direct supervision of our company. It is gathered early, and stored in our seed corn house, where every ear is carefully inspected by experts and only those absolutely true to type and of strong vitality are shelled for seed purposes. You cannot buy better seed corn in America, no matter what the price.

SPECIAL NOTICE

Orders for 5 bushels and over for seed corn will be filled on the basis of our 10 bushel prices.

If your orders for seed corn amount to five bushels and over, you may select from as many different varieties as you wish, on the basis of five and ten bushel prices, but not less than one bushel from any one variety, at five and ten bushel prices.



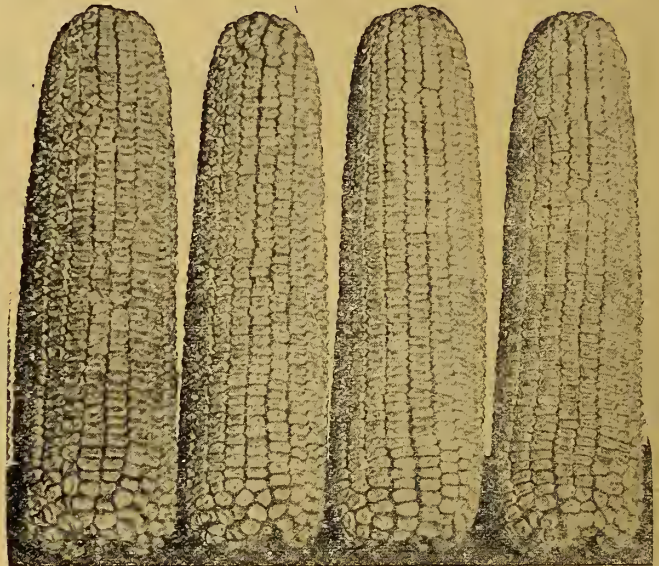
Saint Charles White.

St. Charles White, Red Cob

SAINT CHARLES WHITE. This excellent variety of white corn was originated in St. Charles County, Mo., and is very popular with a large number of our customers.

DESCRIPTION: St. Charles White is a very handsome pure variety of white corn set on a red cob, and the ears are usually 8 to 10 inches long, 16 to 18 rows of deep, broad kernels. The stalk grows from 8 to 10 and 12 feet high, dependent upon the land upon which it is planted, the lowlands and bottom producing the taller stalks; the stalks growing broad, succulent blades, making it very desirable corn for general crop purposes for grain, fodder or for ensilage purposes. Our customers in the South, North, East and West are greatly in favor with this excellent variety of corn. In the South for the grain crop and in the East, West and North for the fodder and ensilage.

PRICE: Postage by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.25; freight or express at purchaser's expense: Peck, 90c; 1 bu., \$3.00; 2 bu. \$2.85 per bu.; 10 bu., \$2.75 per bu.; 5 bu. at 10 bu. prices. Bags free. If wanted in ear, crated, add 75c per bu. to above prices.



Wallace's Favorite White.

We place this superior variety of corn before our customers for the ninth year with renewed assurance that experience has demonstrated that this big white corn has proven one of the best, and is up to the high standard of all our introductions.

In our experience in growing seed corn there has been no season but what we have had many samples sent to us with request that we try them out in our experimental grounds. We wish to say that we greatly appreciate these favors, although it is utterly impossible to make a fair trial of all of them, but each year we try out many sorts, for it has been our aim to find and grow only the best varieties.

In Wallace's Favorite you will find a superior variety and one that has given remarkable results everywhere it has been tried or tested. While we do not claim it will make two, three or four hundred bushels per acre, we know it can be relied upon to yield as many bushels of good, sound corn per acre inside of 120 days as any variety of corn to be found, and if planted on good ground will yield from 90 to 100 bushels per acre, and even more under perfect conditions.

DESCRIPTION: The stalk is large, strong and robust, usually growing from 8 to 10 feet high, with long, broad leaves extending from joints, which are close together and producing one to three ears to the stalk, running from 8 to 12 inches long, with 16 to 20 rows of grains on white cob. This corn is a tremendous yielder. Just think of a field of corn laden with an average of two good ears to the stalk. Surely this corn will not disappoint your best expectations, and we want every farmer who plants corn to try it, no matter where you live—east, west, north or south. It is not only good for the grain it grows, but one of the best combination varieties for grain, fodder and ensilage purposes there is grown. It will please you.

PRICE: 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25; postage or express paid to any point in the United States. By freight or express at purchaser's expense: Peck, 90c; 1 bu., \$3.00; 2 bu., \$2.85; 10 bu. and over, \$2.75 per bu. 5 bu. at 10 bu. prices. Bags free. If wanted in ear add 75c per bu.

Ratekin's Imperial White

Ratekin's Imperial White is a variety regarded with great favor and admiration the country over, especially in the South, where it is grown extensively for main crop, and in the Eastern and New England States, where grown for ensilage and fodder purposes. It is without doubt one of the best varieties for a combination crop for grain fodder and ensilage purposes there is grown or in existence.

We originally obtained the seed of this variety from an old German farmer, who was one of the most successful corn growers in central western Illinois, and we first introduced it thirteen years ago, since which time we have grown and sent out thousands of bushels for seed, and everywhere it has proven a great favorite and success.

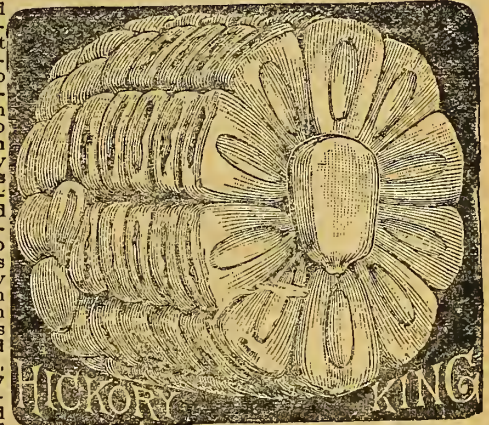
DESCRIPTION: It is pure white, with red cob—a sign within itself of great vitality; ears run from 9 to 12 inches long, measuring from 7 to 8 inches in circumference; 16 to 24 rows of deep grains firmly set on a small red cob, as shown by the accompanying illustration, producing two to three good ears to the stalk. The stalks are short and heavy, averaging from 7 to 10 feet in height, with a large amount of foliage. This corn does well anywhere and everywhere, and is especially adapted to old, poor and thin land, and will make a good crop where other sorts fail. It is also especially adapted to the eastern and southern states, and where early drouth and parching hot weather often injures other sorts. It matures safely anywhere in from 90 to 100 days; is very solid and compact. We can heartily recommend this corn to our customers as one of the surest croppers and best yielders we grow, and could print hundreds of testimonials from those who have tried it, if space would permit, all verifying what we have said of this splendid variety of corn.

PRICE: Postage by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant an acre), \$1.25. By freight or express at purchaser's expense: Peck, 90c; 1 bu., \$3.00; 2 bu. or more, \$2.85 per bu; 10 bu. for \$2.75; 5 bu. lots at 10 bu. prices.

Hickory King

Hickory King is a white variety of field corn which has the largest grains with smallest cob of any corn in existence. The grains are so large and cob so extremely small that when the ear is broken in two pieces a single grain will cover completely the cob section. This corn is of vigorous habits, is a splendid and sure cropper, is especially well suited to light or thin soil, and is a very desirable variety and largely planted in many of the southern states. It, however, does well in the northern and central western states, but it is not as early to mature as our Imperial White, Diamond Joe's Big White and Iowa Silver Mine.

PRICE: Postpaid by mail, 1 lb., 25c; 3 lbs., 60c; 7 lbs., \$1.25. By freight or express, at purchaser's expense: Peck, 90c; ½ bu., \$1.60; 5 bu. and over, \$2.75 per bu. Bags included, f. o. b. Shenandoah.

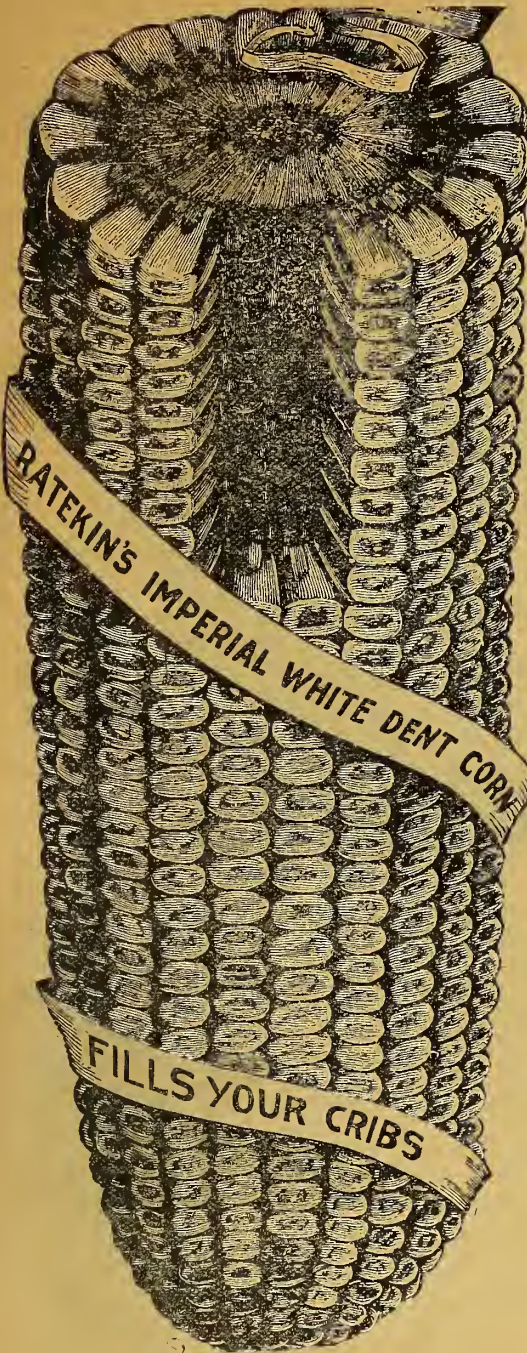


YIELD PER ACRE OF MOST BUSHELS GOOD SOUND CORN

The important point in which the practical farmer is interested in is the most bushels of good, sound, solid corn to the acre. The score card and the corn shows have their place, but the commercial corn growing farmer should not allow himself to become absorbed in ideal ears, unless they can show by records prepotent power of reproduction. In many competitive exhibitions and corn shows we have seen fellows carry away premiums and prizes on most perfect ears; ears selected to conform with the score card by which they were to be judged. Credit for such exhibitions in many cases are due more to an understanding of the score card by the exhibitor than to the general excellences of reproduction. In fact, we have seen some very perfect ears of corn grown in a field of the most scrubby sort, ears that would have made a creditable showing at any farmers' institute, state or national corn show, and if put up and sold at auction would have no doubt brought fabulous prices.

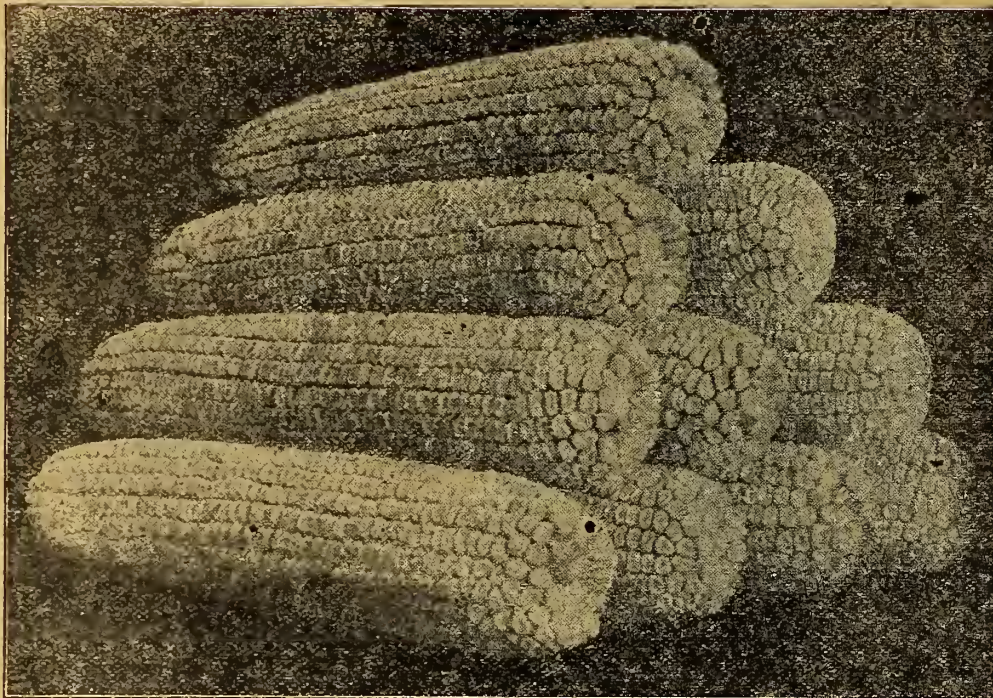
Theoretically, a mother ear should be cylindrical, well filled out at butt and tip ends; kernels evenly and closely set on the cob and as nearly uniform in size and shape as possible, thus securing an even, uniform stand. But back of this there must be a performance record. In other words, its ancestors should have a record of its performances under ordinary conditions. Seed coming from ordinary looking ears, but possessing such strains of inherent power as to produce a medium sized ear on a maximum number of stalks, is certainly far preferable, and more profitable for the farmer, to plant, than the "finest" show corn ever put on exhibition at a corn show which has been selected MERELY from point of beauty, and in accordance with the score card. This is not saying that nothing can be accomplished by physical selection alone, and planting of seed from good, symmetrical ears. A whole lot can be accomplished both in improvement of type and to a certain extent in yield, but corn cannot be bred up to perfection and highest degree in one, two or three years.

After all is said, what the ordinary farmer who plants and grows corn for feeding and commercial purposes wants, is seed corn that will grow and varieties that will give him the most big bushels of good, sound, solid corn to the acre, containing protein that contains the most nutritious and fattening qualities, and sells at best prices on the market and to feeders.



Ratekin's Pride of Nishna

Our Oldest Thoroughbred Corn. More than Forty Years of Pedigree



"Ratekin's Pride of Nishna."

WE BELIEVE "PRIDE OF NISHNA" WILL PRODUCE MORE BUSHELS PER ACRE THAN ANY YELLOW CORN THE FARMER CAN RAISE.

Pride of Nishna This grand variety of Yellow Dent Corn was the first variety originated by my father forty-eight years ago, when he first settled in southwestern Iowa on a farm, long before we engaged in the seed business, and was the first yellow corn introduced by us thirty-two years ago, when we began the seed business. At that time, in making selection of ears for photographic illustration, we did not have in mind present-day ideas of some of the so-called seed corn specialists, but simply went to our cornfield and selected out ears, just common ears of medium size that fairly represented variations, type and character. Everyone knows that about all human beings look somewhat alike, but seldom are there any two that look so nearly alike but what you can distinguish one from the other. The same rule applies to ears of corn, and out of the thousands of bushels we have grown and handled we do not remember to have found two ears of corn when laid side by side but what we could find a difference somewhere. In making selection, however, for the above illustration of ears we have tried to match them as nearly as we could, but when you look upon a beautiful illustration like the above don't be carried away with the idea that every ear of corn you get or that you grow from it is going to be just like the picture you see, but from a field of this corn you can select plenty of ears just as good, and as nearly perfect as they represent, and by saving and planting them in an isolated plot for seed and watching them closely, keeping a record of the performances of each ear with results, and cutting out all barren, weak and sickly stalks before they begin to tassel and scatter their pollen, saving the best and most perfect ears for seed, you will then have begun to improve your yields the same as we did forty-eight years ago, when we began the improvement of corn.

During the past thirty-two years we have sold and sent out no less than a million bushels of this variety for seed—over 70,000 bushels, wholesale and retail in 1915, making shipments to every one of the forty-eight states of this Union, including every county in Iowa, Illinois, Missouri, Indiana and Ohio, and every county in Nebraska and Kansas where corn is grown, and everywhere it has proven a tremendous yielder and top-notch, always maturing in 100 days in the North and 90 days in the Southern States.

We fully recommend this variety for any county in the states of Iowa, Illinois, southern Wisconsin, Michigan and New York; also any part of Indiana, Ohio, Pennsylvania and West Virginia, and from there south to the coast. It is a splendid ensilage corn for states and localities farther north than those mentioned.

While this corn, owing to its great vigor and vitality, does well on poor, thin, sandy soil or old land, it, like other varieties, does best on strong, rich corn land. It is here that it attains its highest perfection and produces the heaviest yields, often making 90 to 100 bushels per acre.

If you are a feeder you will find no corn that contains more nutritious fattening qualities than "Pride of Nishna." If you market your crop you will not find any variety that will market more bushels of good, sound, solid, well-matured corn per acre. No corn grower will make any mistake if he plants his entire crop to "Ratekin's Pride of Nishna." We know whereof we speak when we give you this advice.

DESCRIPTION: The stalks grow from 8 to 12 feet high, dependent on the land—hill or bottom ground—stalks strong and robust, very leafy, broad blades and plenty of them, making an excellent fodder or ensilage corn. Roots almost equal to that of sorghum, resisting wind and storm and standing up well. Ears uniform in size and shape, cylindrical from butt to tip, running from 8 to 12 inches long and 7 to 8 inches in circumference, containing from sixteen to twenty rows of kernels solidly set on a medium small red cob, shelling 86 to 88 per cent grains and often even more. A wagon load of this corn weighs out two to three bushels more than ordinary varieties of corn, thus proving its solidity. It is a golden yellow, and a big crib full of it is a beautiful sight to behold. Its potency or power to reproduce is so great that neither dry or wet weather influences its growth and maturity, as they do many other sorts. By long and continued selection the barren, weak and sickly stalks have been eliminated, which has materially increased its yielding qualities. It is the earliest maturing, large-eared yellow corn known or grown, always making itself safely and soundly beyond danger of frost in from 90 to 100 days' good corn weather. Our word for it, it will please you in every respect.

PRICE: Postpaid, by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.25; by freight or express at purchaser's expense: Peck, 90c; bu., \$3.00; 2 bu. or more at \$2.85 per bu.; 10 bu. for \$2.75 per bu. Bags free, f. o. b. Shenandoah. If wanted in ear, crated, add 75c per bu. to above prices. (Five bushel lots and over at ten bushel prices.)

Ratekin's Mammoth Iowa Yellow Dent

FAMOUS FOR ITS UNIFORM LARGE EARS, HIGH YIELDING QUALITIES; ALSO ITS EARLY MATURITY.

Reid's Yellow Dent A Thoroughbred Yellow Dent

The Most Popular Yellow Dent Corn in the Great Central Corn Belt.

If any seed can truly be called pedigreed, the Reid's Yellow Dent Field Corn is certainly entitled to be known as such, as its history dates many years back. It has been bred up and selected with painstaking care to what is at the present time one of the best varieties of yellow corn grown. Ear medium in size, remarkably uniform, and of a bright yellow color, with solid, deep grain and small red cob. Has from 18 to 24 rows of kernels on the cob, 50 to 60 grains in the row, and is well filled over the ends, and especially the butt, leaving a small shank, which makes it a great favorite with huskers. Best shredding sort, as it shatters the least of any by actual test.

In some of the principal corn growing states of the West it has no equal, and reports from many other states are very flattering. The Iowa Experiment Station report of 1910 gave the Reid's Yellow Dent an average of 100 bushels per acre, while the Agricultural Students' Union of Ohio in 1913 gave it a yield of 14 per cent above all other varieties. As a winner of prizes from the World's Fair at Chicago in 1893, and at Western Corn carnivals and shows down to the present time, it stands at the head.

PRICE: Postpaid, by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.25. By freight or express, at purchaser's expense: Peck, 90c; bu., \$3.00; 2 bu., \$1.85 per bu.; 10 bu., \$2.75 per bu. Bags free, on board cars here. If wanted in ear, crated, add 75c per bu. to above prices. 5 bu. at 10 bu. prices.

Ratekin's Mammoth Iowa Yellow Dent

A variety of great merit, originated, introduced and named by us in 1911, and it has met with hearty favor wherever it has been tried and tested. Our description of RATEKIN'S MAMMOTH IOWA YELLOW DENT Corn consists of simple facts. The accompanying illustration is from a photograph of a medium sized ear of this corn and will give you a very accurate idea of the ears; stalks grow from 8 to 12 feet in height, dependent upon the land, upland or bottom, and is supported by a remarkable root system to support its large, strong, robust stalks, thus enabling it to resist heavy winds and not break over or blow down; ears run from 8 to 12 inches long, very symmetrical and containing 16 to 20 rows on a medium sized red cob; kernels of more than average depth; matures safely and soundly in about 100 days, and is indeed properly named, "Mammoth Iowa Yellow Dent." Beautiful in its rich, golden yellow color and even size from butt to tip of ear. Certain its early, quick growth and maturity, and, all points considered, a splendid, large-eared, early maturing yellow corn "up to date."

RATEKIN'S MAMMOTH IOWA YELLOW DENT was not listed in our catalog until after six years of the closest and most critical observation, careful breeding, selecting and improving in every possible way to bring it to its present perfect type. Meantime we sent out trial packages to thousands of our customers, gratuitously, in various localities all over the United States, for comparison with other well known varieties; and everywhere it gave a good account of itself and made a top notch record as a large yielder, also owing to its broad, closely set blades and foliage it was highly recommended for fodder and ensilage purposes. We can fully recommend this splendid variety to our customers everywhere, and assure them that they will make no mistake in planting largely of it.

PRICE: Postpaid, ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25. By freight or express, not prepaid: Peck, 90c; 1 bu., \$3.50; 2 bu., \$3.40 per bu.; 10 bu., \$3.25 per bu. If wanted in ear crated, add 75c per bu. to above prices. 5 bu. at 10 bu. prices.

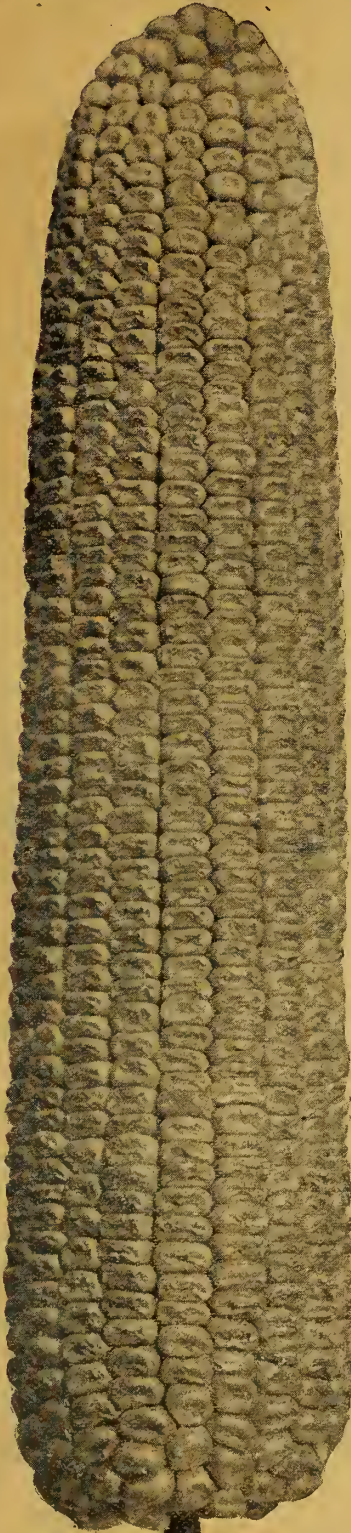
Kossuth County, Iowa, Nov. 20, 1914.
RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

Gentlemen: I thought you might be interested to know what success I had from the five bushels of Mammoth Iowa Yellow Dent seed corn I obtained from you last spring. It was planted May 10th to 12th on 35 acres clover sod ground and had good cultivation and a favorable season and I have just husked and gathered 3,125 bushels of the finest, sound, well matured corn I have grown in Northern Iowa in 20 years.

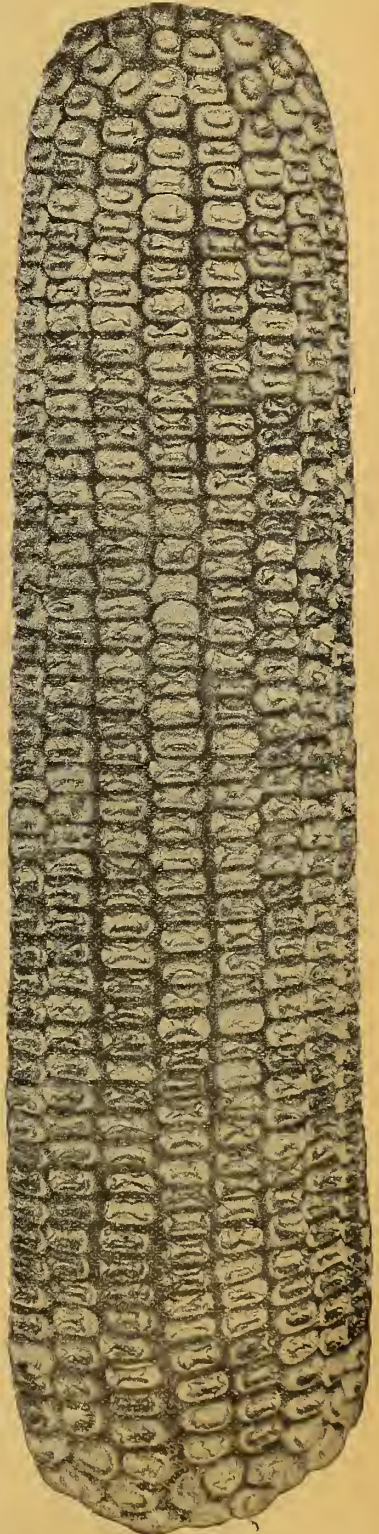
Very truly yours,

JOHN N. LEVERTON.

Resists Drought and Scorching Heat Better Than Any Other Variety.

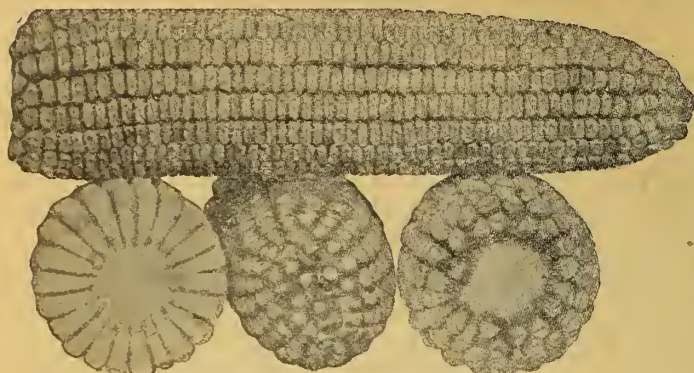


Reid's Genuine Yellow Dent.



Ratekin's Mammoth Iowa Yellow Dent.

Ratekin's Early Gold Standard Leaming



Typical Ears, Gold Standard Leaming.

The King of Cattle Corn This corn was originated by Mr. J. S. Leaming in Ohio in 1826, and was first introduced into this part of Iowa forty-five years ago, by pioneer settlers who came here from Ohio. Even at that early date, long before scientific corn breeding was much talked of, it was noted for its uniformity and purity, also its distinct characteristics and was extensively grown by stock feeders. Since its first introduction many strains of Dent Corn have been started from this oldest known variety, but during all the years we have grown it we have adhered and followed the original type started with, and by careful selection year after year, have greatly improved this excellent variety until it cannot be excelled.

RATEKIN'S EARLY GOLD STANDARD LEAMING is known as the **KING OF CATTLE FEEDERS' CORN**. Not only this, but a great corn for horses, hogs and sheep. There is none better or yielding more bushels. Being rich in protein and oil, it is the ideal from a feeder's standpoint. The cob is more easily masticated by cattle than most other varieties. In addition to its large grain yields it is grown very extensively in the East, New England, New York, Pennsylvania and the Dakotas, for ensilage and fodder purposes, of which it makes and gives a wonderful supply of blades and leaves.

DESCRIPTION: Ratekin's Early Gold Standard Leaming is a pure and distinct variety of beautiful golden yellow. It grows a strong, rugged stalk of 8 to 12 feet, dependent upon land, hill or bottom land, very profuse, broad blades, making it one of the best ensilage and fodder varieties. Ears set $3\frac{1}{2}$ to 4 feet from ground, contain 16 to 20 rows solidly set on small red cob, most stalks containing two good ears, running from 8 to 10 and 12 inches long, usually about 10 inches; matures in 100 to 110 days of good corn weather. We fully recommend this corn to farmers and feeders as a most excellent variety to plant.

PRICE: Postage prepaid by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant an acre), \$1.25. By freight or express at purchaser's expense: Peck, 90c; bu., \$3.00; 2 bu., \$2.85; 10 bu., \$2.75. If wanted in ear, crated, add 75c per bu. to above prices. (5 bu. lots and over at 10 bu. prices.)

Legal Tender

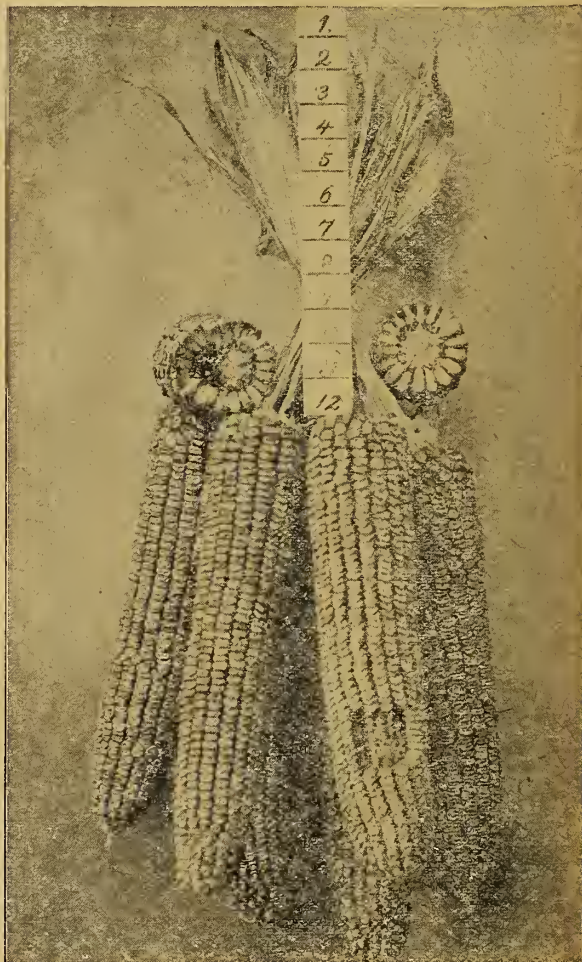
This is one of the most prominent of large medium late varieties. It is a very productive corn where seasons will permit of it maturing, and it's no uncommon thing to find ears 12 inches long that weigh from 1 to $1\frac{1}{2}$ pounds each. The stalks grow 10 to 12 feet high, with very heavy foliage, which makes it valuable fodder and ensilage. Legal Tender has been a great premium taker, and to those who want a large, late variety of corn we believe you will find it a splendid variety and that it will become a permanent fixture on your farm. Under favorable conditions this variety will mature in 120 to 130 days, and seems to be well adapted to the southern states. Our seed stock of this variety is pure bred of inherited stock, and you can depend upon it giving you the best possible results.

PRICE: By mail, postpaid, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25. By freight or express, at purchaser's expense: Peck, 90c; bu., \$3.00; 2 bu., \$2.85 per bu.; 10 bu., \$2.75 per bu. Bags free. If wanted in the ear, crated, add 75c per bushel. 5 bu. and over at 10 bu. prices.

Improved Calico Corn

This corn is the old fashioned kind, and always very popular as a feeding corn, and for many years we have had a great demand for it from stock feeders. So great has been the demand for this excellent feeding corn that we have given greater attention to it the past few years than in former years. Five years ago we found a superior type of this corn, grown by a leading corn breeder in Kentucky, from whom we obtained seed, which has proven a wonder, and without fear of contradiction we can say we have the highest and best strain of this corn that can be found anywhere. The strain is of the large-eared kind, deep grain and small cob, thus insuring early maturity. The ears run from 9 to 12 inches in length and measure 7 to 8 inches in circumference. It is a combination in color of red, white and yellow stripes. It is full of protein and very rich, stock like it and eat in preference to other corn. To all those in want of one of the best corns for stock feeding, we can say we are in position to supply you with the very best of seed.

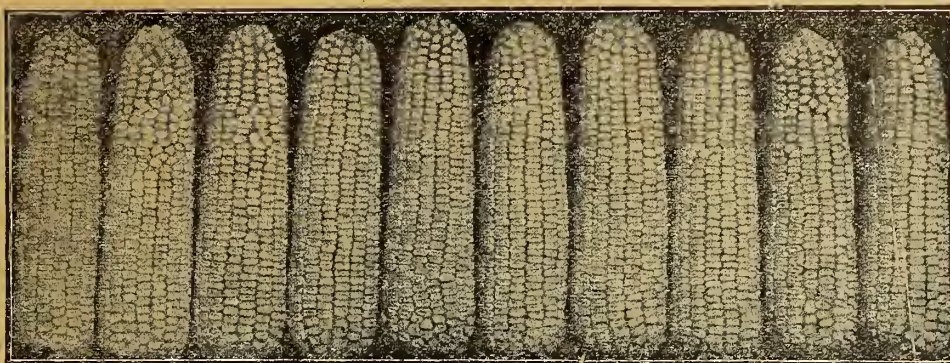
PRICE: By mail, postpaid, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant an acre), \$1.25. By freight or express: Peck, 90c; 1 bu., \$3.00 per bu.; 2 bu., \$2.85 per bu.; 10 bu., \$2.70 per bu. Bags free, on board cars here. If wanted in the ear, crated, add 75c per bushel to above prices. 5 bu. at 10 bu. prices.



We Grow All the Best Varieties

We grow all the leading and best varieties of corn, early, medium and large late varieties, worth planting. If there were better varieties we would grow them. We grow varieties suitably adapted to all parts of the United States. We are the largest seed corn growers in the world, and our sales book will prove that we sell more seed corn than any half dozen seed houses or growers in this country.

Pure Genuine Iowa Gold Mine—Early



The Earliest to Mature; the Purest Yellow; the Deepest Grain; the Best Medium Early; Between the Standard Field Varieties and Extra Early Sorts.

Iowa Gold Mine corn is more widely known than any other variety grown and has made the state of Iowa famous as the mother of this wonderful early variety of yellow corn. It is listed by all dealers and planted in every state in the Union and in Central Europe, South America, South Africa, Austria, everywhere that corn is planted or grown.

DESCRIPTION: It is a medium early, between the leading and standard field varieties, such as we grow for 100 bushel crops in the central corn belt of the north and west, and the extra early sorts that mature in 80 to 90 days in the extreme northern corn growing boundaries, and also for late planting and replanting, where other sorts have failed or been destroyed from one cause or another. **Gold mine is a favorite** in its class with every farmer who ever planted it, ripening a few days later than **Pride of North**, or making itself in about 90 days. Ears are but medium in size and very symmetrical; color a bright golden yellow, as yellow as gold itself; grain is deep, cob small, and therefore dries out early and quickly. Seventy pounds in the ear will shell out 62 to 63 pounds of shelled corn, leaving but 7 to 8 pounds for cob. It is very free from barren stalks; every stalk bears standard one and two good ears, running from 8 to 10 inches long, thus is a very heavy yielder for medium between extra early and standard varieties. The above are honest, fair descriptions, and we are sure this corn will not disappoint your best expectations.

PRICE FOR IOWA GOLD MINE: One ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25, postpaid or express prepaid to any point in the United States. By freight or express, at purchaser's expense: Peck, 90c; ½ bu., \$1.60; 1 bu., \$3.00; 5 bu. or more, \$2.75. Bags free. f. o. b. Shenandoah.

Silver King—Extra Early—A Corn for Northern States OR LATE PLANTING IN THE SOUTH

Development and Early History of Silver King

Pedigreed Seed Corn, like pedigreed stock, must have a record behind them showing their ability to produce larger yields than other leading varieties under precisely the same conditions and same treatment, also their vitality to resist extremes of seasons and weather to the utmost degree.

Attention was first directed to Silver King Corn through the efforts of Mr. H. J. Goddard of Winnishiek County, Ia., Winnishiek County being one of the extreme northern counties of Iowa (bordering on the state of Minnesota), who in his day ranked as the foremost corn breeder in Iowa. Its origin can be traced back to Indiana, for it was brought from that state to Fayette County, Iowa, in 1862. In 1869 Mr. Goddard secured a half bushel of this seed. The possibilities of developing a very superior type or variety of early corn from the stock so appealed to him that he continued to grow it, selecting each year the type of ear which came nearest his ideal. This has had much to do with the present uniform type of the corn. While he gave special attention to early maturity, at the same time he selected an ear of good size, deep kernels and comparatively small cob, and with little space between the rows.

Prof. Moore of the State Agricultural College of Wisconsin, who was instrumental in introducing this corn into Wisconsin, says: "In the first year of its introduction into this state, 1907, it made a yield of 98.6 per acre on our experimental grounds, and an average yield for the whole state of 57 bushels per acre, as compared with 33 bushels, the average of all other varieties."

In Kossuth County, Iowa, Mr. Will Banks had much to do with the introduction of this corn in northern Iowa, exhibiting it and winning many prizes at county and state exhibitions. Space will not admit of hundreds of first premiums, prizes, sweepstakes and championships won on Silver King, but we cannot refrain from speaking of two boys in northern Iowa, who won over \$1,200 in prizes at exhibitions inside of five years after they began growing this corn.

DESCRIPTION. In appearance is a beauty. Ears averaging eight to ten inches, uniform in size and type, pure white in color, set compactly in straight rows, a strong grower, early enough to mature as far north as St. Paul, Minn.; has a decided double-ear characteristic, one reason for its fine yield records.

PRICES: Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25. By express or freight: Peck, 90c; bu., \$3.00; 2 bu., \$2.85; 5 bu., and upwards, \$2.75 per bu. Bags included, f. o. b. Shenandoah.



Early Varieties For Northern or Late Planting

(Continued from preceding page)

RATEKIN'S QUEEN OF NISHNA. 90 DAY CORN



The Earliest, Hardest, Most Productive, Purest Yellow Ninety-Day Corn Grown.

Queen of Nishna This variety of corn was originated by us thirty years ago, and while it was well nigh perfect itself when we first began to catalog it, we have constantly tried to improve it in every way we could by culling out all barren stalks and increasing the number of ears to each stalk, and for the past ten years we have made an average yield of over 60 bushels per acre, and in 1914 we grew the enormous yield of 94 bushels on our experimental grounds, or over 20 bushels per acre better yield than from any one of six other early varieties, side by side with it on the same ground under identical conditions. We have frequently gathered well dent hard corn from it in 75 days from the time it was planted and have shelled corn from it 85 days from time planted.

During our experience in growing and sending out seed corn for the past thirty-two years, we have sent hundreds and thousands of bushels of this variety to the farmers of North and South Dakota, Minnesota, Wisconsin, Michigan, New York, and the New England states; also to the mountain states of the west and as far as the Pacific coast; in high altitudes where the nights are cool and seasons short; besides have sent it to all the corn belt and southern states, where for other reasons early prolific varieties are wanted and required. During this time we have received testimonials numbering into the hundreds and thousands, all bearing the universal expression and commendation for its ability to endure extremes of heat, cold, flood and drouth, also for uniform good yields and early maturity. Our word for it, it has no equal as an all around big cropper for an early maturing yellow dent corn.

DESCRIPTION: The ears ordinarily run from seven to ten inches long, with sixteen to twenty rows of compact grains solidly set on a small red cob. The stalks grow from seven to nine feet high, dependent upon the ground where planted, and under ordinary conditions make a yield of from forty to sixty bushels per acre. We cannot recommend this corn too highly for all the purposes named, and are sure that no farmer will make any mistake in planting at least a part of his crop to this excellent variety of early corn. Under ordinary conditions this corn can be fed from the first to the middle of August. We believe this to be the only corn that can be fed as early and at the same time give a big yield per acre.

For an early feeding corn **Ratekin's Queen of Nishna 90 Day Corn** has no equal. This makes an ideal ensilage corn for the northern farmer, maturing before frost and making a large yield. For the eastern farmer the same may be said, adding that this makes a fine feeding corn. In the south this corn has taken the place of the well known June corn making a greater yield and being a fine drouth resister.

We recommend this corn to all. It is one thing the average farmer requires—early maturing corn. This is it and we urge you to try some this year. It might come in very handy if you have to replant or cannot get into your field until late.

PRICE: Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.25. By freight or express at purchaser's expense: Peck, 90c; ½ bu., \$1.75; 1 bu., \$3.50; 2 bu., \$3.40; 5 bu. and upwards, \$3.25 per bu. Bags included, f. o. b. Shenandoah.



RATEKIN'S IMPROVED Pride of the North

Pride of the North This variety of early corn was originated by Mr. A. L. Goddard of Kossuth County, Iowa (one of the extreme northern counties of Iowa) thirty years ago, and at once sprang into prominence as the earliest of all Yellow Dent corns, and is a great favorite in the extreme northern states. It is a very pure and handsome Yellow Dent corn. The ears running from seven to nine inches long, with small cob and deep kernels; ears usually containing from fourteen to eighteen rows; seventy pound ears shell out sixty-two to sixty-four pounds; will ripen and mature safely anywhere in ninety days; can be planted as late as June 25th, and make itself by September 10th. Good soil is capable of growing four to six stalks to the hill; many stalks have two ears and usually produce from forty to fifty bushels good, sound corn per acre.

PRICE: One lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.25, postpaid. By freight or express: Peck, 90c; ½ bu., \$1.70; 1 bu., \$3.25; 5 bu. or more, \$3.10 per bu. Bags free on board Shenandoah, Iowa.

White Cap Dent—Large Eared Early Variety

We have grown and handled **White Cap Yellow Dent** quite extensively for several years and have found it a very early maturing corn and an enormous yielder for an early corn. It, however, is not quite as early as "Silver King," white, or "Ratekin's Queen of Nishna," "Gold Standard 90 Day" or "The Alaska Northwestern Dent," but is equally as early as "Pride of the North," and we regard it as a much larger yield, and while we do not admire the color of this corn as much as we do a pure yellow or white, it produces the bushels and for feeding or market purposes it is equal to the clearest white or yellow corn grown. The grain is a white cap, and the balance of it is a pale color between a white and yellow. All those who have planted it, many of which are wonderfully well pleased with it, and the increased demand for it, also reports we have received about it, many of which are really astonishing, compel us to recognize the fact that **White Cap Yellow Dent Corn** has come to stay. Our stock of this corn is invariably exhausted every season that we have been handling it, thus proving its growing popularity as we have grown an increased acreage and quantity of it each succeeding year.

I am not advising you to plant all your crop to this variety to the exclusion of other sorts, but for a field of corn for early harvest and for feeding, you will do well to try ten or twenty acres of it. I have known instances, plenty of them, where it was planted as late as June 15th and it produced sixty, seventy and eighty bushels of good, sound corn to the acre.

PRICE: Shelled, by mail, postpaid, 1 lb., 25c. By freight, your expense, ¼ bu., 90c; ½ bu., \$1.70; 1 bu., \$3.25; 2 bu. or more, \$3.10 per bu.; 5 bu. or more, \$3.00. Bags free, f. o. b. Shenandoah.

WE ARE SEED CORN GROWERS AND NOT SEED CORN DEALERS—HAVE MADE THE GROWING AND BREEDING AND HANDLING OF SEED CORN A SPECIALTY FOR THIRTY-TWO YEARS PAST.

Extra Early Varieties FOR NORTHERN LATITUDES AND LATE PLANTING

Minnesota No. 13 Corn EXTRA EARLY YELLOW DENT. The commanding points of excellence which place Minnesota No. 13 Corn at the head of all yellow dent varieties for northern planting are: Its earliness, its enormous productiveness, its adaptability to a great variety of soils and climates.

To Prof. W. M. Hays, formerly agriculturalist at the Minnesota State Experiment Station, recently Assistant Secretary of Agriculture, Washington, D. C., is due the honor of having originated this valuable extra early yellow dent corn. Not only is it fully as early as any of the yellow dent corns, but its record of heavy yields is such as to mark it as distinctly and undoubtedly the most profitable of all the yellow dent varieties. It was the remarkable productiveness of the Minnesota No. 13 Corn that led Prof. Hays to say: "The inherited quality of corn to yield heavily or poorly, all comes in the ten pounds, more or less, of seed planted to the acre," and never was the truth of this statement better exemplified than in Minnesota No. 13. Much time and labor was expended by Prof. Hays and his staff of assistants in breeding and perfecting this strain. It was first disseminated as Minnesota No. 13 Corn, the intention being to later give it an appropriate name, but it has since become so widely and favorably known as Minnesota No. 13 that it must continue to be so known. The Directors of the Minnesota Experiment Station consider it the best yellow dent corn for Minnesota, North and South Dakota and Wisconsin; other stations agree in this opinion. Mr. John S. Cole, Assistant Agriculturalist at the Brookings, South Dakota Experiment Station, says: "At the county fair held here last week Mr. Geo. N. Kennard exhibited one bushel of Minnesota No. 13 Corn that I consider was the finest sample of yellow dent corn that has ever been displayed here. Mr. Kennard's corn was raised on clover sod and is estimated to yield from sixty to eighty bushels an acre."

The ears are of handsome appearance bearing 14 to 16 rows of bright, rich yellow, smooth, wedge-shaped kernels packed closely on the cob from butt to tip. The ears average eight inches in length and are borne usually two on a stalk. No corn excels in quality the Minnesota No. 13; the cobs are well filled and the individual kernels plump and of good color.

Minnesota No. 13 thoroughly matures in ninety days when planted on favorable soil and in a good location, places it out of danger under average conditions. A variety of corn which will show such valuable characteristics is an acquisition on any farm, especially for planting in the northwest where early frosts are common. It may be planted as late as the second week in June and yet safely mature a crop.

Another point to which particular attention should be directed is its adaptability to changes in soil and climate. Minnesota No. 13 Corn will thrive and produce abundantly on most any soil and will do remarkably well under adverse conditions when other varieties fail entirely.

The stalks grow to a height of seven feet and being leafy make excellent and very nutritious fodder.

We consider this a most valuable corn to grow, as do also the various Experiment Stations we have mentioned. We refer also to those who have purchased their corn of us in the past.

We especially wish to impress upon the intending purchaser one fact, and that is the importance of ordering early. Every spring, for several years, our supply of Minnesota No. 13 Corn has become exhausted before the season was over, thus disappointing many of our customers. When the supply is gone it will be impossible to fill further orders for this variety, as we will not send out anything but genuine Minnesota grown seed corn of high germination. Large pkt., 10c; lb., 25c, postpaid; 3 lb., 60c; 7 lbs., \$1.25. By freight or express at purchaser's expense: Pkt., 90c; ½ bu., \$1.75; 1 bu., \$3.40; 2 bu., \$3.30; 5 bu. and over, \$3.25 per bu. Bags free.

Ratekin's Extra Early Gold Standard 80 DAY CORN

Ratekin's Gold Standard This corn is in a class of its own; is a small yellow dent; ears somewhat smaller than Pride of the North or Minnesota No. 13 and is perhaps the earliest dent corn to mature there is grown anywhere. The stalks grow from six to eight feet high, dependent on the land where planted; set ears about three feet from the ground; ears run from seven to eight inches long with twelve to sixteen rows, very deep kernels set on very small red cob, and usually shells out 63 and 64 lbs. to seventy pounds of ears (one bushel). It is a strictly pure bred corn, every stalk producing one, two and three ears, averaging two ears to the stalk, and yields amazingly heavy for a small extra early corn, usually making a yield of from 25 to 40 bushels per acre, but has been known to make as high a 65 bushels per measured acre. It is a wonderful corn in more ways than one. It's a wonderful yielding corn, and is a wonderful early maturing variety, making itself in 80 days, and when planted late after the ground is thoroughly warm will make itself in 75 days, safely beyond any danger of frost. It's a corn that is especially suited and adapted to the extreme northern latitudes and high altitudes of the mountain states, west and northwest, where the nights are cool and corn does not make the rapid growth there that it does in the corn belt of the central western states.

PRICE: For Ratekin's Gold Standard 80 Day Corn, 1 lb., 25c; 3 lb., 60c; 8 lbs. (enough to plant an acre), \$1.40, prepaid. By freight or express at purchaser's expense: Pkt., \$1.00; ½ bu., \$1.80; 1 bu., \$3.50; 2 bu., \$3.40 per bu.; 5 bu. and over, \$3.30 per bu. Bags free, f. o. b. Shenandoah, Iowa.

Money in Pop Corn

Pop Corn should be found in every garden and on every farm, especially if there are children in the home to enjoy it during the long winter evenings. The constant demand for pop corn makes it a profitable crop. Let the boys raise an acre of it for their own spending money. Be sure to procure good, pure seed for them, as pop corn mixes readily with field varieties.

WHITE RICE, cultivated and used more than any other sort. Short ears, with four to six ears to the stalks, with long, pointed kernels. Very productive. The yield per acre is equal to any of the field dent varieties, as it can be planted much closer than common dent varieties of corn.

Boys or girls can grow an acre or two of pop corn and dispose of the product to their neighbors or to the nearest merchant. Why not turn it over to the children? It will afford them pleasure and profit.

Plant at the rate of six to eight quarts to the acre. We have a choice lot of this pop corn carefully chosen for seed purposes.

PRICES: Pkt., 5c; lb., 20c, postpaid. By express or freight at purchaser's expense: Lb., 10c; 20 lbs., \$1.50; 100 lbs., \$6.00.



Ratekin's White Cap Dakota Bloody Butcher



Ratekin's Dakota Bloody Butcher.

Ratekin's Dakota Bloody Butcher

is an extra early maturing corn and is a great favorite everywhere known or grown. It's the leading variety in the Dakotas, Minnesota, Wisconsin, Michigan and northern New York and the New England states, also in the high altitudes of the west, also on the Pacific slope, where the nights are cool and seasons are short. This corn is by no means as handsome as some other varieties, but it is iron clad and of intense vitality to resist unfavorable conditions, such as cool days and nights, extreme wet or dry weather and can always be relied upon to make a good crop, even where other varieties fail. It's the sure thing—stands drouth equal to Kaffir corn, Feterita or Sudan grass, three of the greatest drouth resisting plants we have any knowledge of.

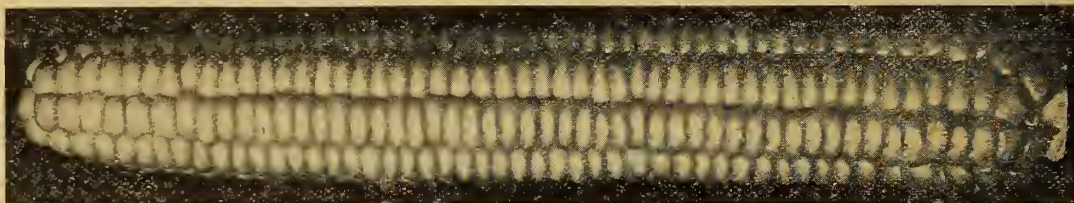
DESCRIPTION. This is a distinct variety of corn—can easily be distinguished from any other variety. On the ear; outside top of kernels are white capped; inside after shelled is a bloody red; cob white as snow; ears long and slim, running from 10 to 12 and some of them 15 inches long, bearing from 12 to 16 rows very solidly set on cob; depth of kernel medium, averaging with ordinary corn. The nutritious quality of this corn is very high, many stock feeders claim that one bushel is equal to 1½ bushel of ordinary varieties. We, however, do not claim this much for it, but it is certainly of unusual nutrition, a variety of corn that is worth considering. It does better on old, poor, thin land than almost any other variety, save possibly "Hickory King" and on good land produces from 30 to 50 bushels per acre, and in some instances has been known to yield 70 to 75 bushels per acre, but 40 bushels on ordinary land with ordinary culture is easily attained. Length of time for it to mature is from 80 to 90 days. For early feeding there is no corn that surpasses it. Every stock farmer should plant at least a few acres of this corn. It will not disappoint your best expectations.

PRICE: 1 lb., 25c; 3 lbs., 60c; 8 lbs. (enough to plant an acre), \$1.40, prepaid, mail or express. By freight or express purchaser's expense, pk., 90c; ½ bu., \$1.70; bu., \$3.30; 2 bu., \$3.25 per bu.; 5 bu. and over, \$3.10 per bu. Bags free, f. o. b. Shenandoah, Iowa.

Early Flint Varieties Seed Corn

SANDFORD'S WHITE FLINT

Handsome
of All Flints



An 8-rowed white variety, with ears from ten to fifteen inches long, two to two and one-half inches in diameter, and well filled out to the extreme end of the cob. The cob is small and the kernel large and broad; ripens in seventy-five days. This corn is well adapted to the northwest, also in the east and New England states, and is said to have produced 200 bushels of ears to the acre in Massachusetts and other New England states. Has given excellent results in Minnesota, the Dakotas and other northern states. Excellent for ensilage. Stalks are very leafy, splendid for feeding green.

PRICE: Packet, 5c; lb., 25c; 3 lbs., 60c; 8 lbs., \$1.40, postpaid. By freight or express, not prepaid: Peck, 90c; ½ bu., \$1.70; 1 bu., \$3.25; 2 bu. or more, \$3.10 per bu.

Ratekin's Improved Yellow Flint, Extra Early



An eight-rowed yellow flint variety, with ears from ten to fifteen inches long, 1½ to 2½ inches in diameter, and well filled out to the extreme end of the cob. The cob is small and the kernel large and broad; ripens in seventy-five to eighty days. This corn is well adapted to the northwest. Has been grown in northern Minnesota and North Dakota for fifteen years with great success and complete satisfaction. Average season of maturity, eighty days. Very prolific, having yielded 164 bushels of good, sound ears to the acre and is said to produce 194 bushels of ears to the acre in Vermont. Many stalks have two and sometimes three good ears. Stalks average about six feet in height and make excellent fodder. Very few suckers.

PRICE: Packet, 5c; lb., 25c; 3 lbs., 60c; 7 lbs., \$1.25, postpaid. By freight or express, not prepaid, peck, 90c; ½ bu., \$1.40; bu., \$3.25. Bags free. Two bu. or more, \$6.20; 10 bu., \$30.00.

Corn with a Record

Thoroughbred high yielding varieties cannot be bred up and produced in one year. It requires time, practical knowledge and experience. A step year by year, "slow but sure," but when you order your seed from us you get the benefit of our thirty-two years' experience breeding seed corn. We are the oldest and largest seed corn growers in the world. Ratekin's "famous" Iowa grown seed corn is known and planted from the Atlantic to the Pacific and from the gulf to Canada. We began the seed business to stay. Others have tried to imitate us, but many of them have come and gone. We are still here, but could not stay if our seed and representations did not bear out our claims. "Satisfaction guaranteed or money back" is our motto.

Early Flint Seed Corn

IT'S ALL IN THE SEED

DIBBLE'S MAMMOTH YELLOW DENT

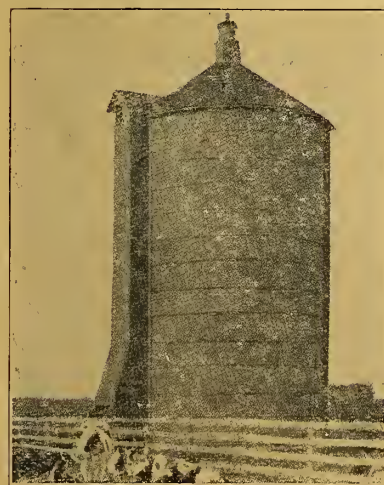
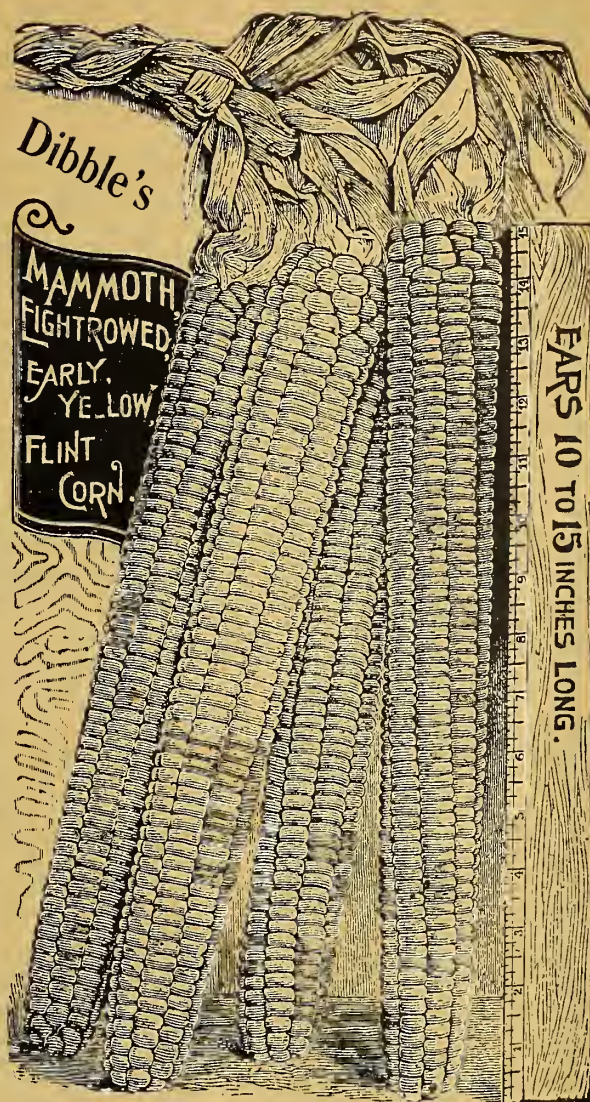
(Our stock of Flint corn is all shelled.)

Every year from June 1st to September 1st we devote our time looking after our contract growers and investigating different sections of the country to find the best varieties adapted to the various climatic conditions. While in northern New York some years ago on an inspecting tour we found a Flint Corn known as "Dibble's Mammoth Yellow Flint," and everywhere extolled as the most wonderful of all Flint varieties. So favorably impressed were we from what farmers told us we went directly to the originator and procured a supply of seed from his private stock for our planting purposes. Since then we have been growing and selling it with highly satisfactory results all over the Dakotas, Minnesota, Wisconsin, Michigan, New York and the New England states; also sent it to every state in the Union. In short, we believe it to be the earliest, best and most productive flint corn grown. The stalks average nine to twelve feet high, dependent upon ground, each stalk bearing one, two and three ears. It leaves very profusely, nearly to the ground, and both the leaves and stalks are very nutritious, stock eat every vestige of the stalks as well as the leaves or blades. The ears average from ten to fifteen inches in length. It is very early to mature, and if planted late or when the ground is warm it will ripen and be ready for the knife within sixty to seventy days from planting. The seed we furnish our customers is from hand picked ears, running ten inches and over in length, thoroughly dry, well cured and can be depended upon to grow almost to a grain.

Owing to the superior advantages of this corn over other sorts of its class we want to urge all who grow corn in the far north or where the seasons are short and where frost may be expected the last of August to September 1st, to order early.

PRICE: 1 lb., 25c; 3 lbs., 60c; 7 lbs., \$1.25, postage or express prepaid to any point in the United States. By freight or express, not prepaid: Peck, 90c; ½ bu., \$1.75; 1 bu., \$3.25; 2 bu. or more, \$3.10 per bu. Bags free.

Varieties of Fodder Corn Corn fodder may be divided into five classes, viz.: Large Southern Varieties, Medium Dent Varieties, Early Dent Varieties, Flint Varieties and Sweet Varieties. Each of these has its friends. All may be successfully grown for fodder in almost any latitude. The merits of each class are briefly stated under their respective headings. If further information is desired we shall be glad to supply it as far as lies within our power, and will be pleased to make recommendations when desired. There is one point we want to impress on stockmen, dairymen and others using corn fodder and that is to place your orders early. By so doing you secure the benefit of low prices. You can test the seed and have corn.



The Silo We are not selling Silos. We have none for sale. We have no stock or interest in any factory. There are many good Silos manufactured. We do not know which one is best. But we do know that every farm and farmer who has ten, fifteen or twenty head of stock, or more, should have a silo. Silage is good for the cow, the horse, hog, sheep, colts and calves. The silo is endorsed by every agricultural college and every leading agricultural publication, and by all who have used them. They are money savers and money makers, and keep your stock healthy, thrifty and fat at a small cost.

The value of a silo is unquestioned. By its use crops may be saved in dry seasons that could not otherwise be preserved. By its use the whole corn crop may be saved instead of only 60 per cent of it, as now, when the ears only are harvested. By its use stock may be fed succulent feed at all times and thus enjoy June conditions the year around. By its use crops are placed under shelter, where they are handled in bad weather with the utmost ease and comfort. By its use better and quicker results are assured in either the beef or dairy herd. By its use the farmer feels that he is up to date, because he does his work easier, quicker and with more profit. He has more time and more money. He is at peace with himself, his neighbors and his dumb animals. He is an optimist. He has made a good investment.

**Ratekin's Seed House Pioneers
FROM A SMALL BEGINNING TO**

Largest Seed Corn Growers in the World

Field Corn—Early Flint Varieties

Longfellow Flint is an eight-rowed yellow flint of the Canada type; ears cylindrical, running from ten to fifteen inches long; color rich glossy yellow. Average height of stalk, seven to nine feet; average distance base of ear from ground, three feet. Weight of all field and flint corn, fifty-six (56) pounds per bushel.

PRICE: Postpaid; Large pkt., 10c; lb., 25c; 3 lbs., 60c. By express or freight at expense of purchaser: $\frac{1}{4}$ bu., 90c; $\frac{1}{2}$ bu., \$1.75; 1 bu., \$3.25; 5 bu. and over, \$3.10 per bu. Bags free.

North Dakota Yellow Flint Resembles White Flint in earliness, habit of growth, etc., but the grain is yellow. Under normal conditions this variety will mature in 70 to 75 days. In localities where seasons are short and nights are cool it may be depended upon to give a crop. The yield must, of course, vary with conditions of soil, cultivation and season, but it has been no uncommon occurrence to secure a yield up to 75 bushels per acre. Gives an abundance of fodder of splendid quality. Average height stalk, 5 ft.; average distance base of ear from ground, $1\frac{1}{2}$ ft. Average length of ear, 8 inches. Large pkt., 10c; lb., 25c; 3 lbs., 60c; 7 lbs., \$1.25, postpaid. $\frac{1}{4}$ bu., 90c; bu., \$3.25.

The Beautiful Nishna Valley of Southwestern Iowa

In previous issues of our catalogues we have repeatedly referred to our unparalleled climate, soil and other natural environments as a corn growing country and while we did not intend to speak of this again, we cannot resist or refrain from repeating some of the same things over, viz.: "There may be more beautiful valleys than the Valley of the Nishnabotna. Not having traveled all over the world I do not know, but I have traveled over much of the United States. I have heard travelers who made the trip around the world and visited about every country on the face of the globe rave over the beauties of rivers and streams in foreign lands. But I did not know whether they were telling the truth or just blowing off, and neither does it make any difference for this occasion. I do, however, know this to be the home of the greatest corn growing district to be found in the world. The Nishnabotna country is as fertile as the Valley of the Nile, and we have the richest, wealthiest class of farmers here to be found in any place I have ever seen. Big corn crop was the foundation of all this wealth. Wherever corn is grown in abundance there will be found all kinds of stock and a general diversity of all that contributes to the prosperity of its people."—J. W. RATEKIN.

What is a Bushel of Seed Corn Worth?

THE INHERITED QUALITY OF CORN TO YIELD HEAVILY OR POORLY ALL COMES OF SEED PLANTED.

People frequently write us that they would like to buy seed corn from us, but cannot because the prices are "too high."

The average price of our seed corn is less than \$3.00 a bushel, including bag.

IS IT WORTH IT?

A bushel of seed corn will plant from six to eight acres. To use our seed will cost, say, thirty cents an acre more than if common crib corn is planted. It is, therefore, evident that if our seed produces one even bushel more to the acre, mind only one bushel more, the entire cost of the seed and freight is paid for by this extra yield.

THE SEED CORN WE SELL.

The corn we sell is grown from seed which has been brought to such a degree of perfection as to render it of almost priceless value. It represents the labor of many years and the expenditure of a very large sum of money. It has behind it the history of big crops. We know that when we plant it that barring flood or drouth it will yield heavily. At the proper time we go through our fields and detassel. When the corn comes to our warehouse it is hand-picked down to such a point as to give us on the average about 15 bushels to the acre of seed that goes to our customers; the balance is sold on the markets for feed. Is this care worth thirty cents an acre to anyone planting corn?

GERMINATION.

We thoroughly test every lot of corn before we send it out to our customers. At the present writing we have just completed testing thirty separate lots of seed corn. Two tests were made of each lot. Every lot, except one, germinated 95 to 100 per cent, and that one grew 92 per cent. Never in the history of our business have we had better germinating corn than is now in our warehouse. But wherever you may buy you should know for yourself that your seed corn grows before you plant it. We sell our seed under the following

GUARANTEE:

That it be tested promptly on arrival, and if it is not found to the entire satisfaction of the purchaser it shall be returned within ten days from time received at our expense and the money paid for same will be immediately refunded without question.

WHEN TO ORDER.

It is of great advantage to both our customers and ourselves if orders are placed early. This applies not only to corn, but to all seeds. After April 1st several important varieties may be sold out and cannot be replaced. The "spring rush" is then on; employees become wearied with the long strain of night and day work, orders and shipments are more likely to be delayed, and errors are more likely to occur. In our customers' interests, therefore, as well as our own, we urge early orders.

FROM ST. LOUIS POST-DISPATCH.

Southwestern Iowa is the natural and most favored home of corn in the world, where it attains its greatest perfection. This is no idle boast. The claim can be easily established. The Nishnabotna Valley is wonderfully productive. The rich soil extends four, six and even eight feet in depth, full of life-giving qualities that make the monster crops of corn. Mark a square twenty-five miles eastward from the banks of the Mississippi River and ten miles south to forty miles north of the state line, and there is not another such productive spot in the world.

For thirty-two years pioneers in the seed corn business, the Ratekins have talked and worked at "the breeding of corn." At first they were laughed at for their plans, but their advice and persistence has resulted in the raising of unheard of crops. One hundred bushels to the acre is no uncommon thing. But such crops are secured only by carefully selected seed and varieties and by a mixture of brains with its cultivation.

If you want to improve your corn and increase your yield, don't fool away your time sending to amateurs for seed because they offer it at but little above elevator prices. Cheap prices may seem attractive to some, but it's better and cheaper to pay five dollars per bushel for good seed corn; thoroughbred, of inherited productive qualities, than to plant scrub seed as a gift.



Longfellow Flint.

Grand Varieties of Fodder Corn



A Field of Ratekin's Giant Shenandoah Fodder Corn.

For years we have been preaching the great value and importance of growing fodder and ensilage corn to the farmers. The unusual seasons of the past few years have assisted us in bringing these facts home to them, and has fully aroused them to its great importance as never before.

Ratekin's Giant Shenandoah Fodder Corn This is among the best fodder corn, either to feed green right out of the field, or to put up for the silo, or to cure and stack away, cropping as high as thirty-five tons to the acre. It is sweet, tender and juicy, and furnishes more nourishment than any other variety; has short joint and an abundance of leaves and blades, and growing as tall as the tallest, thus making it of extraordinary productiveness.

Drill $1\frac{1}{2}$ bushels to the acre in rows three feet apart. Five or six kernels to each foot in the row, plow and cultivate until three feet high, stirring the surface of the ground often, after which it will take care of itself.

PRICE: Peck, 90c; $\frac{1}{2}$ bu., \$1.75; 1 bu., \$3.00; 2 bu., \$2.90; 5 bu. and over, \$2.75 per bu. Bags free, f. o. b. Shenandoah, Iowa.

Eureka Ensilage Corn grows the tallest stalk and has the most leaves and blades and will produce more tons of material for the silo than any other variety. Stalks usually grow 10 to 14 feet high, containing 24 to 30 pairs of long broad blades; each stalk producing three to four ears somewhat under medium size; kernels white and rather broad, thick and short. In fact, it has made a record with us of over seventy tons on one acre of ground. Enough to feed ten head of cattle twelve months.

PRICE: Same as Shenandoah fodder corn.

Red Cob Fodder Corn This is a standard southern variety which has made a wide reputation all over the country, and is noted for its splendid qualities for both fodder and ensilage purposes. It grows very tall, ranging from twelve to sixteen feet, and is a very leafy, broad blade.

PRICE: Same as Shenandoah fodder corn.

Medium Dent Fodder Corn There are many who prefer for fodder smaller growing corn than the large and later varieties, claiming for it the following advantages: First, that it matures earlier and gives well formed and partially or fully ripened ears; that it is more easily cured; that the smaller stalks make finer and richer fodder. We believe this variety will best please the advocates of the type of corn above referred to. It is tall growing, averaging 8 to 12 feet. It is very leafy. It has a small stalk. It will form, even in northern Minnesota and the Dakotas. It's the corn for fodder! It's the corn for ensilage and the best in every respect for everything and everywhere; east, west, north or south, for early or late planting, where the seasons are short or in high altitudes where the nights are cool; also for early feed. Don't overlook or pass this Flint Corn up. For ensilage or fodder plant rows three feet apart, drilling eight to ten kernels to the foot in the row, and cultivate same as general field crop.

PRICE: Same as Shenandoah fodder corn.

Ratekin's Gold Standard Leaming Highly recommended by the best ensilage authorities for northern states. True Yellow Leaming produces large quantities of leaves. It is not only good for the grain it grows, but one of the best combination varieties for grain, fodder and ensilage purposes there is grown; it will please you.

See price and full descriptions on page 16, this book.

Flint Varieties for Fodder The farmers of Maine, Vermont, New Hampshire and Massachusetts use Early Flint varieties almost exclusively. There is absolutely no waste to this class of corn, as the stalk is as greedily eaten as the leaves, and the feeding value is superior to everything but the sweet fodder corn.

When it comes to Flint varieties for ensilage you want to quit looking after you have come to **Dibble's Mammoth Yellow Flint**. There is nothing grown—nothing ever offered that is better—none that equals it. First, it is as early as the earliest varieties—making itself in from sixty to seventy days, good corn weather. It grows stalks averaging from 9 to 12 feet high and leaves or blades from tassel to ground, and both leaves and stalks are very nutritious, and stock devour stalks and blades as readily as they eat clover hay. It produces one, two and three ears, running from 10 to 15 inches long, and has been known to give a yield of 225 bushels of ears in the New England states, and almost as much in Minnesota and the Dakotas. It's the corn for fodder! It's the corn for ensilage and the best in every respect for everything and everywhere; east, west, north or south, for early or late planting, where the seasons are short or in high altitudes where the nights are cool; also for early feed. Don't overlook or pass this Flint Corn up. For ensilage or fodder plant rows three feet apart, drilling eight to ten kernels to the foot in the row, and cultivate same as general field crop.

See price and full descriptions on page 21, this book.

For Grain and Fodder Crop Combined We want to especially recommend Stowell's Evergreen, Sweet Corn, Gold Standard, Leaming, White Corn. Either of these varieties will give you the best possible combination for a grain, fodder or ensilage crop. All of them mature early, and each have a very heavy stalk, broad leaves and lots of them.

SWEET CORN, STOWELL'S EVERGREEN

A Grand Variety for Fodder



Stowell's Evergreen.

If there is a variety of corn that is entitled to a whole page in this book, as a general utility crop, for the table, for canning purposes, for nutritious food for the human family and all kinds of stock, from the hog to the horse, to cut up and throw out to them during the latter part of the season when grass and clovers are dead or dried up, or to cut up for fodder for winter feed, it is **Stowell's Evergreen Sweet Corn**. It matters not what the cost of the seed, even at \$10.00 per bushel, it will pay every farmer to plant a few acres, enough to carry his stock, whether many or few, through the late summer and early fall months when pastures are dead or dried up. Yes; among all the splendid varieties for fodder and ensilage purposes we regard **Stowell's Evergreen Sweet Corn** as one of the most valuable grown, either for fodder, canning purposes or for seed purposes, either of which makes it a most desirable and profitable crop. In addition it is a most excellent variety to cut and throw out to milch cows, horses, hogs and the colts and calves during the summer and fall months, when grass is dried up and pasturage short. As a green fodder fed in this way one acre will furnish as much feed as eight acres of grass. The sweet, juicy stalks give it a flavor that makes stock like it as they like nothing else, and stock will devour the last vestige of the stalks and blades as clean as they would wipe up the best clover in the midst of winter. It is claimed by all dairy farmers that it will not only greatly increase the flow of milk, but will add a third to a half to the cream production. All we have said about its wonderful qualities as a green feed may be said with equal truth and force when it is cut up and put into shocks and fed during the winter months. Even in its dry stage stock of all kinds will eat every vestige of the stalks and blades. There is no waste whatever in this corn.

Plant with drill in rows $3\frac{1}{2}$ feet apart, eight to ten kernels to the foot in the row. Cultivate thoroughly, plowing deep and close to the corn the first time, after which cultivate shallow or surface cultivation until three feet high. This variety of corn will make you from fifteen to thirty tons to the acre.

PRICE: 1 lb., 25c; 3 lbs., 60c; 7 lbs., \$1.25, postpaid or express charges prepaid to any point in the United States. By freight or express at purchaser's expense: Peck, \$1.00; $\frac{1}{2}$ bu., \$1.75; 1 bu., \$3.50; 5 bu. and over, \$3.25 per bu. Bags free.

IN CONCLUSION: The one problem that confronts every farmer who keeps stock is how to get feed to supply his horses, cattle and hogs. The corn plant is the foundation food, and every portion of it should be used. A good silo on every farm where stock is raised and where corn can be grown solves the problem. But where the farmer don't feel able or conditions do not justify he should at least grow a few acres of Fodder Corn and take care of it in the most practical way he can. We cannot too highly recommend **Stowell's Evergreen** where you have only a few horses or cows. Plant a few acres, if not more, and our word for it you will be pleased. Don't plant too early, nor when the ground is cold and wet. Sweet corn will sour in the ground when other field varieties will grow under wet, cold weather conditions.

Brazilian or Stooling Flour Corn

This corn yields from one to two times more corn to the acre than common corn, and a great deal more in shelled corn. It stools like wheat, each kernel producing from 4 to 8 stalks with from 3 to 4 ears on each stalk, about 5 to 6 inches in circumference and from 8 to 10 inches in length of pure white kernels. It is the best variety for ensilage. It contains a larger percentage of starch than any other corn and when ground and bolted by the same process as wheat, gives a better bread and biscuit flour than can be made from wheat. It is also used largely as roasting ears. Only two kernels should be planted to the hill, and afterward thinned to one, and cultivated the same as other corn.

PRICE: Pkt., 5c; $\frac{1}{2}$ pt., 20c; pt., 35c; qt., 60c, postpaid. By express or freight, not prepaid 4 qt., \$1.00; pk., \$1.60.

Egyptian Wheat Corn

Cultivated extensively in India. Recently brought to this country. Yields very valuable crops. Of stooling habit, produces 3 to 6 stalks from one grain. Large heads of round, plump white seed, like Broom Corn. Excellent feed for cattle, horses and chickens, makes good pop corn, and, when ground, excellent pancake flour. More of a grain than forage corn, as it has double the seed of Kaffir Corn, and more than any Cane or Sorghum plant.

PRICE: Pkt., 5c; lb., 30c; 3 lbs., 75c, postpaid. By express or freight, not prepaid, 10 lbs. or more, at 10c per lb.

Broom Corn

THIS IS A BIG MONEY MAKING CROP AND CAN BE GROWN SUCCESSFULLY IN ALL LOCATIONS.

Broom Corn is one of the most profitable crops the farmer can grow if given proper attention. If you want full information about how to grow Broom Corn, write to the Department of Agriculture, Washington, D. C., for Farmers' Bulletin on Broom Corn.

The demand exceeds the supply, which causes the present high prices for brooms. You will find ready market for all the good Broom Corn you can grow.

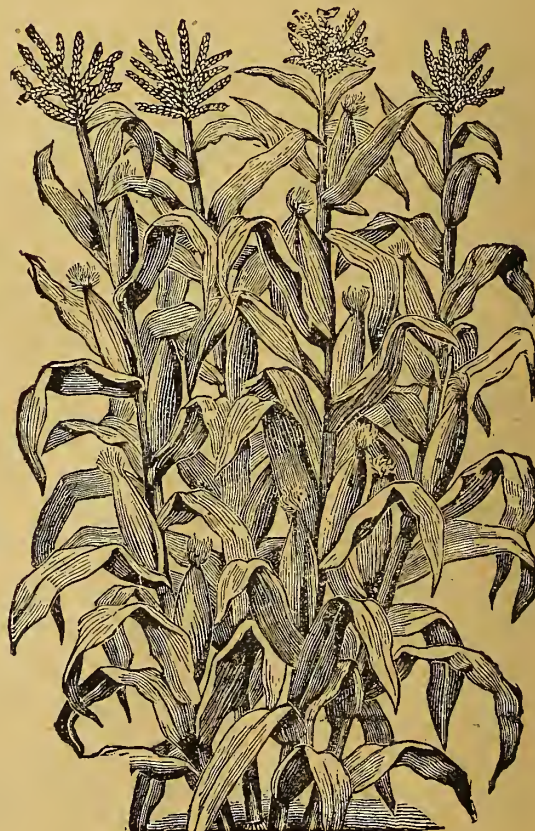
Improved Superior Evergreen

THE STANDARD VARIETY.

This is the most popular variety in the market. The original seed was secured in Tennessee, then bred and climated, thus making the brush of better quality. In growing it, all imperfect stalks are cut out and the brush is raised and cultivated especially for seed. Postpaid, $\frac{1}{2}$ lb., 15c; lb., 25c; 3 lbs., 65c.

Oklahoma Dwarf

Grows from 3 to 4 feet high, with straight, smooth brush, principally used for making whisks and brushes, though can be used very nicely even for the larger brooms. Postpaid, $\frac{1}{2}$ lb., 15c; lb., 25c; 3 lbs., 65c. Write for quantity prices.



Brazilian, or Stooling Flour Corn

\$72.00 WHAT IS A BUSHEL OF SEED CORN WORTH? \$72.00

The Saving on One Bushel of Seed Corn is Worth Seventy-two Dollars

Not once, but every time you plant a bushel of seed corn. On an average a bushel of seed corn will plant eight acres. If each acre produces 60 bushels of corn, which is only a good yield in the corn belt, and it is worth 60 cents per bushel, the corn from eight acres will be worth \$288.00. But if you get only 75 per cent of a crop, at the same price it is worth only \$216.00; thus your inferior variety of seed has cost you this difference, which is \$72.00 that your scrub seed has cost in the result of your crop. There is, however, a much greater difference in much of the seed corn that is planted. (See what Prof. Holden says on page 5 of this catalogue.)

HIGH YIELDING CORN IS NO ACCIDENT: Do you, Mr. Farmer, realize the great difference between scrub corn and the improved or pedigreed sort? Do you know how many grains on your seed ears were fertilized from the pollen that comes from barren stalks or suckers. Perhaps while you were husking your corn last fall you found a good, fine ear, one that maybe would look well at some corn show, and possibly carry off a premium. But did it ever occur to you that some of the fathers of the kernels on that ear might be deficient individuals, the progeny of barren stalks, etc.? Remember, in corn, as everything else, "the sins of the fathers are visited even unto the third and fourth generation." Again, this should be proof of the fact, and necessity, that every farmer who grows corn should have a seed plot. Nothing will pay better for the time and labor required. Select the very best corn you can find, better still, send and get at least enough of some of our pedigreed seed stock to plant an acre, and plant this on a plot to itself. Tend it the same as you do your other corn, and just at or before the tassels begin to appear, go through it and cut out every barren or sickly stalk. This is not as much of a job as you may think. You can easily go through three acres per day, and this comes at a time and season when you are not usually extremely busy. Study the stalks as well as the ear, taking seed ears off the kind of stalks you wish to grow, and at the end of two or three years you will see such an improvement in your corn that you will wonder why you never before discovered so many interesting things in the improvement of corn. Get your boy a bushel of our "Diamond Joe's Big Early White" or "Pride of Nishna," yellow, and let him enter our Boys' Contest for a prize premium and you will find you have one of the greatest helps in solving the much talked of corn question that you have ever before found or had. Best of all, send and get enough of our thoroughbred seed corn to plant your entire crop.

The Highest Yielding Seed Corn is the Kind to Plant

There are 3,556 hills of corn on an acre of land, planted $3\frac{1}{2}$ feet apart each way. If one stalk to the hill, and it produces but one 10 oz. ear, it will yield $31\frac{1}{4}$ bushels per acre. Two stalks that produce two 10 oz. ears each will make $63\frac{1}{2}$ bushels; three stalks, two of which weigh 14 oz. and one 6 oz., will yield 108 bushels. Three stalks to the hill that produce 3 ears weighing $\frac{3}{4}$ of a pound each, will produce 114 bushels. DRILLED: One stalk every 14 inches in the row, if it produces one ear that weighs 12 oz., it will make $114\frac{1}{2}$ bushels per acre. If drilled 16 inches apart in the row and each stalk produces one ear that weighs 16 oz., it will produce 116 bushels per acre.

If you want big yields, plant thoroughbred, medium varieties that produce one and two medium sized ears to the stalk, in preference to planting big ears and getting many barren stalks. By careful observation and count it will be found that many fields of corn planted from ordinary varieties produce all the way from 10 to 35 per cent barren stalks, which produce nothing and which very materially reduces the yields.

If you plant our seed the chances are much greater that your hills will bear a bigger yield than if you plant non-inherited varieties. To use our seed will cost you less than 50 cents per acre, perhaps 20 to 25 cents per acre more than to plant corn selected from your cribs, but the increased yields, over such seed, will cost you less than a cent per bushel for the increase. But suppose our thoroughbred seed gave you an increase of only one bushel per acre; this would more than pay the entire cost of the seed.



AGAIN! How Much is a Bushel of Seed Corn Worth?

This problem bothers a great many farmers every spring, especially those who have to buy seed corn. We have it to answer often, as we are frequently asked how much ought to be paid.

Incidentally, let us say that we do not think seed corn sells for enough, usually. At least in comparison with the seed of other crops that would seem to be true. We have always noticed that where good prices are paid, more care and attention is given the corn, and low prices cheapen the product. But, in the above we referred more to a comparison of the cost of the seed and money value of the crops. A bushel of seed corn can easily grow 400 bushels of corn. At ordinary prices of seed corn then, the seed to grow a bushel of this grain costs less than one cent. In oats, the seed costs from six to eight cents for every bushel produced; while in wheat it is over ten cents per bushel of grain grown.

Where corn is grown successfully no one doubts but that it is one of the most profitable crops raised. Then why is not the seed worth as much as seed of other crops? The seed of oats, wheat, or alfalfa cost from \$3.00 to \$5.00 per acre. Seed corn at the same rate would be worth \$25.00 to \$35.00 per acre. Therefore, we maintain seed corn would not be too high at \$10.00 to \$20.00 per bushel. It would not be impossible to get this amount returned in increased production the first year. But, we would look further than that.

In this way, it would be impossible to estimate the value that might come to future crops through a bushel of seed. The sale of a few bushels of seed, which can always be done if well kept, will return more than the original amount invested even though it is a high price.

Then, in view of the above facts, we would say, if seed corn has the right breeding and selection back of it, and is strong in germination, the price could go to ten times what is usually paid and still be a safe investment.—Editor "Corn."

The above illustration, made from an actual photograph, shows the great prize winning corn, yield and crop, grown by Mr. A. Webster Butler of Plymouth County, Mass., in 1910, which was awarded \$100.00 in gold as first premium and prize, for largest yield of sound well matured dent corn, shelled—contest being open to all the New England states. Yield being 133 bushels grown on one acre, from $\frac{1}{4}$ of a bushel of Ratekin's Diamond Joe's Big Early White; valued by Mr. Butler at one dollar per bushel, or \$133.00. Total, \$233.00, produced at a cost for the seed to plant it, \$1.00 postpaid. Mr. Butler obtained identically the same yield again on an acre of ground from this corn in 1911, but there was no prize or premium offered or awarded on dent corn the last year. See full statement from Mr. Butler on page 8 this book.



Boys and Girls; Get Into This Two Hundred Dollar Corn Growing Contest For Largest One Acre Yields from Seed Purchased from Ratekin's Seed House

There has been such marvelous progress accomplished during the last ten or twelve years in the way of improvement and increased yields of corn, through Prize offers and BOYS' CORN CONTESTS, as would astonish our fathers and grandfathers, could they come back to this good world again and see and learn of the hundreds of BOYS and GIRLS that are growing yields of 100, 150 and 200 bushels of corn per acre; even some have produced as high as 225 to 237 bushels of corn on an acre of ground. We were the first, so far as we know, to offer such prizes on Corn Growing Contests, fifteen years ago. Since then many state, district and county agricultural associations, also bankers and private individuals have taken up this method in many places, to stimulate interest and to demonstrate ability to grow larger yields and bigger crops—more scientific farming.

THIRTY-EIGHT PRIZES; TOTAL, \$200.00 IN GOLD.

The awards will be as follows: First prize, \$25; second prize, \$20; third, \$15; fourth, \$10; fifth, \$9; sixth, \$8; seventh, \$7; eighth, \$6; ninth to eighteenth, inclusive, \$5 each; nineteenth to twenty-eighth, inclusive, \$3 each; twenty-ninth to thirty-eighth, inclusive, \$2 each.

COMPETITION OPEN TO ALL who purchase and plant one bushel or more of either our varieties of field dent corns listed on pages 9, 10, 11, 12, 13, 14, 15 and 16 at regular catalogue price. It will be permissible to select any one acre or more of the best corn in the field at gathering time, but the part selected must be all in one block. Land upon which the prize crops are grown must be measured in such a way as to be correct measurements, as well as acreage yields, must in all cases be proven by affidavits of contestant and at least one unrelated and disinterested witness. All yields must be determined by actually weighing the corn and computed at 70 lbs. per bushel in the ear, Nov. 1st to 20th, in the presence of at least one unrelated and disinterested witness, as no estimates will be accepted.

COST OF PRODUCTION of the crop is quite as important as the yield and will be considered in determining successful contestants; the rent value of land, cost of breaking the ground, preparing the seed bed, cost of seed, planting, fertilizing, cultivating, gathering and weighing and every other item of expense, including the labor of every person, must be calculated at 10 cents per hour; the labor of every animal used at 5 cents per hour. We earnestly urge that every one who enters the contest or who is interested in our prize offer will keep a record of the material facts having any bearing on the crop; kind of land, time of planting, manner of cultivation, time of maturity and yield. This information will be greatly appreciated by us, and helpful to others in the future, and will have public dissemination for the encouragement of others.

IN ADDITION we shall expect and require that each contestant select and send us at least ten of the most select ears of corn, by express prepaid, not later than December 1st. We want the most choice ears that can be selected, none to measure less than 10 inches in length, as we wish them for exhibition purposes at the Iowa State Corn Show, also other exhibitions during the winter of 1916 and 1917.

WHO ARE ELIGIBLE. All Boys and Girls between the ages of 10 to 20 years old are eligible to become contestants; it matters not where or in what state you live, so that you agree to comply with the above requirements. All you need to do to become a contestant is to write and state on the order sheet or your letter at time of sending it in for seed corn; simply write on it, "I WISH TO ENTER THE BOYS' or GIRLS' CONTEST FOR ONE OF YOUR THIRTY-EIGHT PRIZES OFFERED IN YOUR 1916 SEED CATALOG." (The father or mother can make the purchase for their Boy or Girl, but we must have the full name of the one who is to enter the contest.) We will be glad at all times to offer or give any suggestions we can to assist any of those who signify their purpose to enter the contest. **REMEMBER, THERE ARE THIRTY-EIGHT BOYS AND GIRLS THAT ARE GOING TO BE AWARDED ONE OF THESE PRIZES.** We might have increased the amount and made but three prizes out of the \$200.00 to be distributed, but we want more of the Boys and Girls to share in this distribution.

BLANKS FOR REPORTS WILL BE FORWARDED LATER ON AND IN GOOD TIME, but should you from any cause fail to receive one drop us a card and another will be forwarded.

This offer is made solely for the purpose of encouraging those interested or engaged in corn growing and agricultural pursuits to secure the adoption of better farming methods.

Yours for bigger yields and better corn crops,
Jan. 1st, 1916.

RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

Paducah, Ky., Sept. 1st, 1914.

Gentlemen: While recently visiting my nephew over in Christian Co., this state he told me about sending to you last spring for enough of your "Diamond Joe's Big Early White" seed corn to plant fifteen acres. He said he was agreeably surprised at the excellent stand he got, as he was afraid the seed would not vegetate. He planted this corn May 21st, when the ground was hard, and had not had any rain for more than a month. He also planted his native corn at the same time. After planting both, there was no rain until June 15th, when a light shower fell; the drought continued throughout that section until August 7th,—the longest continued drought for many years, or ever known. Notwithstanding this, your

Diamond Joe Corn was fully matured when the rain came, Aug. 7th, and made something over 10 barrels per acre, while the native corn made less than five barrels per acre, and of a very poor chaffy quality. From my observation I pronounce this corn of yours the best drought-proof corn I ever saw. I believe I can go out among the farmers and with my acquaintances and sell several hundred bushels in West Ky. and Tenn., provided you can furnish the seed in car load lots, say of 700 to 1,000 bushels at a reasonable price.

Upon receipt of this I shall be pleased to hear from you with such a proposition as you may have to offer.

Respectfully,

H. C. WEST.

Appreciative Letters From Some of Our Customers

St. Elizabeth, Miller Co., Mo., Sept. 1, 1914.

RATEKIN'S SEED HOUSE: Gentlemen: That Diamond Joe's Big Early White Seed Corn I got from you last spring proved all O. K. and very satisfactory. It stood the severe drouth we had here remarkably well and made an excellent crop.

I am a miller, and now want some good, hard winter wheat. Our soft varieties do mighty well here, but what we want now is some good hard variety, something you know to be suited to our part (southern Missouri). I want 25 or 30 bushels for my own sowing and a number of others will also want some.

Hoping to hear from you soon with samples and prices on such varieties as you think is best suited to this country, I am,

Yours very truly,
FRANK OTTO,
Milling Co. and Grain Dealer.

TWO AND THREE EARS TO THE STALK

Staats Mills, Jackson Co., West Va., July 26, 1915.

I sent to you last spring for some Diamond Joe's Big Early White seed corn and planted it April 28th on hill ground and think I have got the prettiest field of corn I ever seen. Every stalk has two and three ears on them, and I expect there has been forty people spoken to me for seed from it for the coming year. I want to order some Winter Seed Wheat and would be pleased for you to send me descriptive price list, so I can select the kind I want.

Very truly yours,
W. H. MORRIS.

BIG STALKS AND BIG EARS

Lincoln Co., Mo., July 25, 1915.

Gentlemen: Diamond Joe's Big White corn is proving a grand success with farmers here who planted it last spring. It is hardier, standing both wet and dry weather better than any other variety. It has large thrifty stalks with much larger ears than any other variety. What I am wanting now is some good, soft beardless variety of winter wheat that will match up with Diamond Joe's big white corn, something that will withstand freezing and thawing winter and wet and dry weather. Send me your Seed Wheat catalogue with prices and descriptions.

Truly yours,
REUBIN ANSON.

Longview, Texas, Feb. 9, 1915.

I purchased some seed corn from you last year for my own planting, but now am now enclosing an order for some my neighbors who watched my crop grow and results obtained from it last year. My corn did not produce as much stalk as some our native varieties, but such ears I never seen compared with the amount of stalk. Last year was unusually dry with us, extremely so, but notwithstanding this my crop from the seed I got from you made more than two times as much in yield as any our native sorts.

Truly yours,
J. M. MASSEY.

Columbia, Tenn., Feb. 9, 1915.

Last year was a very dry one with us, but am pleased to say, my corn grown from seed I got from you done much better and made twice the yield that our native corn made. In fact, all the seed I sent to you for done remarkably well. I shall want a lot of seed again this year and will surely send you my order for what I want.

MRS. HATTIE W. ROBERTS.

Kaufman, Texas, March 9, 1915.

Enclosed find order for 2 bushels Gold Standard Leaming and 1 bushel Diamond Joe's Big Early White seed corn. This corn has been highly recommended to me by our U. S. demonstrator, who is located here this year. Hoping you will give this order prompt attention and immediate shipment, I am,

Yours very truly,
THOMAS JONES.

Iberia, Mo., March 1, 1915.

The seed corn purchased from you has proven the best yielding corn I ever planted, so I shall try you on some your other varieties. Please ship at earliest convenience.

Yours truly,
MRS. ANDY JARRETT.

Burbank, S. D., April 16, 1915.

Please send me copy of your catalog, as I want to order some your seed corn. I ordered and planted some your corn a few years ago and obtained the best results from it I have ever had from any corn I ever planted. Rush catalog along as it's getting near corn planting time.

JOHN JACKSON.

Wellsville, Penn., April 18, 1915.

Seed corn has arrived safely and think it fine. Thanks for prompt attention.

Yours truly,
GEORGE E. NILES.

Mt. Vernon, Tex., Jan. 27, 1915.

I have planted your seed corn two years ago and again the past year. Sold some my home grown the past year, and to all it gave splendid satisfaction. I believe I can sell much more this season and would ask that you give me your net cash price per bushel—also give me freight rate to this place.

Yours truly,
J. M. PARCHMAN.

Flat Rock, Ill., April 10, 1915.

The seed corn I got from you last year was extra fine—got a good stand, although the season was driest in years, I had a splendid crop, good as any about here and better than any in this vicinity.

F. L. JOHNSON.

Drew, Miss., March 25, 1915.

I failed to receive your catalog this year, but seen your advertisement, which reminds me that I will want some seed corn again this year. I have sent to you a number of times for seed corn and other seeds and have always had splendid results.

R. W. TAYLOR.

Edina, Mo., June 17, 1915.

We are having much rain and wet weather, which has held planting back until it's very late, and I now want several bushels of some early maturing variety. I met one my neighbors today who got seed corn from you early in the season and he recommended me to you very highly. Let me hear from you with varieties and prices by return mail.

H. E. SNELLING.

Nemaha Co., Neb., June 19, 1915.

RATEKIN'S SEED HOUSE: Can you furnish 90 day seed corn? If so, at what price? Many of our farmers will have to replant on account of heavy rains and high waters. You will find by referring to your files that I sold quite a lot of your seed corn a year ago, and glad to say it all gave good results and proved highly satisfactory.

Respectfully,
J. C. DEUSER, JR.

Apache, Okla., Feb. 20, 1915.

Dear Sir: I am well pleased with the seed that I purchased from you. Two years ago I sent you an order for \$50 worth of cotton. We had a great drought and very unfavorable weather, but I am satisfied that they were the best that I ever planted. I am unable to send you as large an order as I would like to this year, would have liked to ordered some more of your Diamond Joe seed corn, but was unable to do so. I am sending you another order with this letter.

Yours truly,
GEO. A. SHWEN.

Hamlin, Kans., March 1, 1915.

Dear Sir: I have at last succeeded in sending you my order for seeds. I am disappointed in not being able to send you a larger order for the seeds of yours which I have used in the past were fine indeed.

Respectfully yours,
CARRIE M. SLATER.

Ravenden, Ark., April 15, 1915.

I am enclosing small order for some your Flint corn. Send by express. All the corn first ordered from you came on time—was planted and all up looking fine.

H. F. SPAULDING.

Buffalo, Kan., March 2, 1915.

Please find enclosed my order for seed. I got seed from you last year and they were just fine.

Yours truly,
R. T. CANDELL.

175 BUSHELS ON ONE ACRE.

Stewartstown, Penn., Feb. 26, 1915.

Enclosed find another order. Please send as soon as possible. The seed corn I sent to you for two years ago, sure was fine. It made a yield of 175 bushels on one acre of land. Some ears measured over a foot long. Rush order along. It's nothing like having the seed when ready to plant and sow.

Truly yours,
R. N. BILLHART.

Kaufman, Tex., Nov. 17, 1915.

Enclosed find letter from Mr. J. H. Dudley. It speaks for itself—thought perhaps you would like to have it. I have another letter from one of my demonstrators, who advises me he obtained 61 bushels per acre from your Diamond Joe's Big White.

C. K. WALTERS,
U. S. Demonstrator.

Kaufman, Tex.

I purchased some of your Diamond Joe's Big White last spring and have just gathered my crop. It had reasonable good cultivation, although weather conditions were

Appreciative Letters From Some of Our Customers—Continued

indeed very unfavorable, consisting of eight weeks' unabated drouth, commencing the latter part of May. I however, made an average of 50 bushels per acre, while on similar land just across the road on another plat, with native corn, yielded less than 15 bushels per acre. **Diamond Joe's Big White** matured full four weeks ahead of it. I shall plant my entire crop with this variety another year from seed I have saved.

With best wishes, I am,
Yours truly,

J. R. DUDLEY.

West Point, Texas, Jan. 4, 1915.

I ordered some your **Diamond Joe's Big Early White** Corn and found it just as good as you represented. Every stalk made big ears and every acre a big crop.

S. H. FRIERSON.

Scurry, Tex., Feb. 24, 1915.

Last year I sent for some your **Diamond Joe's Big White**, planted it April 6th. The early part of the season was very wet, but later turned off excessively dry and we had no rain for seven weeks, yet I grew an average of 61 bushels per acre, while my neighbors on same kind of land who planted native corn got about 20 bushels per acre.

STEWART DAVIS.

Lincoln, Tex., Jan. 23, 1915.

One of my neighbors bought some of your **Diamond Joe's Big Early White** from you last year and I saw it growing and thought it the finest variety of corn I ever seen grown in this country. Kindly send me a catalog by return mail. I want some of this corn.

PERTY PHOENIX.

Grand Saline, Tex., Jan. 18, 1915.

I ordered some your pure genuine **Iowa Silver Mine** three years ago and have been growing it ever since with splendid success, and am well pleased.

A. G. CRONE.

McDade, Tex., April 19, 1915.

This is to say that I received the seed corn and all other seeds I ordered from you all O. K., have planted the corn and it is up looking fine—grew almost to a grain. I cannot say too much for the quality of the seed you sent me.

J. C. MORGAN.

Eustace, Tex., Feb. 23, 1915.

I am sending you another order for seed corn, and it may be interesting to you to know that I have grown your **Pride of Nishna** here for the past ten years with marked results and great success. Last year I exhibited some of it at Corsicana fair and was awarded first premium on yellow corn. It is the best corn for this country I have ever seen grown here.

Truly yours,

D. A. DODD.

Hunt County, Texas.

I have not received your seed catalogue. Please send one by return mail.

The three bushels "**Pride of Nishna**" I got from you last spring, grew the best crop in Hunt county. We have had a series of dry seasons in Texas for three years, culminating in a general burn-out last year. Conditions for the preparation of the ground were never better. I plowed my ground early and continued to work it thoroughly—meantime sent to you for my seed. It came nner than silk, arriving March 1st, and I planted next day. We had practically no rain during the corn growing season. But I got sixty-five bushels per acre from my entire crop of 20 acres. Sure it is drouthproof.

JOHN A. ARNOLD.

Hearne, Robertson Co., Tex., Feb. 9, 1915.
Office (Hearne Mercantile Co.)

Gentlemen: Several days ago our Mr. Easterwood sent you by parcel post two ears of **Diamond Joe's Big Early White** corn raised on prairie land this past dry year. We thought it fine and shall plant our entire crop with it this year, but would like two bushels of your best private stock of this corn to start another plot for another year. If you can have the seed shipped to us from some point in this state send it from there, if not ship direct from Shenandoah.

Very truly yours,

HEARNE MERCANTILE CO.,

By H. B. Easterwood, Mgr.
Goldthwait, Mills Co., Texas, Jan. 24, 1914.

Gentlemen: Last year I received a copy of your seed catalogue and sent to you for my seeds. Among them enough of your **Diamond Joe's Big Early White** corn to plant five acres. The weather and season was very dry and hot, but my corn of this variety made a yield of over 45 bushels per acre, of an extra quality, while my home grown corn, I have been planting for years, was a flat-total failure—made nothing. I expect to plant my entire crop to **Diamond Joe** from seed, I saved, the coming season.

Enclosed find my order and remittance for what seeds I shall want this season.

Very truly yours,

JOHN E. EVANS.

Bailey, Miss., Oct. 10, 1908.

My experience in planting Ratekin's Seed Corn has proven a great success. I regard their **Iowa Silver Mine** and **Pride of Nishna** as the best corn for this country ever introduced here. It makes itself three to four weeks ahead of native sorts; besides is the corn for early feed

or for late planting. In short, Ratekin's northern grown corn has always given good results and perfect satisfaction.

J. STENCEL.

Dunganby, Miss.

I have planted and grown Ratekin's (Iowa grown) "**Silver Mine**," white and "**Pride of Nishna**," yellow, and found them most excellent varieties. Every stalk produces at least one good ear and many of them two. It matures fully four weeks ahead of our common native sorts and always makes a good and sure crop.

JOHN BRIFFIN,

Merchant and Planter.

Atlanta, La.

I have been selling Ratekin's Iowa grown seed corn for a number of years and find it has given the very best of results and satisfaction. It never fails to make a good crop with proper planting and cultivation; besides it makes fully four weeks ahead of native sorts. I can fully recommend it to farmers and planters of Louisiana.

G. C. LEWIS.

Nowata, Okla.

I bought \$75.00 worth of seeds from you two years ago, and am pleased to state that I grew the finest crop of corn from your "**Pride of Nishna**," yellow, that was ever raised in this part of the country. Not only this, but I brought to this town the finest load of ears of corn that ever come to this place before or since.

J. W. STAATS.

Ellsworth County, Kan.

I am well acquainted with Mr. Paul Reaume; he is a large farmer and cattleman. You may send me 35 bushels of your "**Pride of Nishna**" seed corn.

F. G. BABCOCK, Mgr.

Obian County, Tenn.

The last order I sent you received and planted July 1st, and had roasting ears from it in 60 days.

C. A. HENDON.

Gracey, Ky.

Please send me a catalog at once—don't care if it is an old one. I bought seeds from you in 1907 and they gave most perfect satisfaction and I want to send to you again this season for a lot of seeds.

W. R. LANDER.

Kearns, Tex., March 27.

I received my order of seeds yesterday and found everything all O. K.

C. W. NOWLIN.

Pennington, Tex., March 18.

Have received my seeds ordered from you; everything all right—first class.

C. F. HORTON.

Tulla, Tex.

Received my seeds all O. K. and well pleased with them.

J. H. SHOEMAKER.

Henryetta, Okla.

I received my seed corn, planted it and it's all up looking fine.

W. F. TODD.

Forum, Okla., March 22.

The remainder of my seed corn has arrived and I wish to thank you for promptness in tracing and rushing it through to me.

C. A. STEPHENS.

Lebanon, Tenn.

I have received my seeds, all O. K., and wish to thank you for promptness.

M. F. GARCY.

Wynne, Ark.

Seed corn received today in good shape; looks fine.

Yours truly,

W. M. MORRIS.

Mercer, Pa., Feb. 5, 1915.

Ravenden, Ark., Feb. 23, 1915.

I received seed corn today, came through in good shape. Have examined it and am well pleased.

Truly yours,

ONA DAVIS.

McGlone, Ky., Feb. 28, 1914.

I want to say a word in regard to your **Diamond Joe's Big Early White**. In 1912 I raised an average of 92½ bushels per acre from it. In 1913, the driest year we ever had, I grew 75 bushels per acre, and from your new Alberta, Canada, Oats I grew an average of 91 bushels per acre. My corn was planted on good bottom land in 1912 and in 1913 it was planted on hill land. I am writing this merely that you may know what results I have had from your seed.

Very truly,

THOMAS FIELDS.

Clinton, Ky., Feb. 22, 1915.

Please send me your seed catalog. Seed corn I got from you last year came fine, grew good and made me an excellent crop. Am well pleased.

JERRY R. JOHNSON.

Glasgow, Ky., March 3, 1915.

I am sorry to say I have not received your catalog this year. I was greatly pleased with results from the **Diamond Joe Big White Corn** I got from you last year, and want to advise those that are looking for the best white corn grown to stop when they get to this corn and send for seed of some of it. It's the best white corn I have ever seen or planted. Send me a catalog and oblige.

Yours truly,

O. C. FORBES.

Appreciative Letters From Some of Our Customers—Continued

Mercer, Penn., Feb. 5, 1915.

Gentlemen: I moved from West Virginia this year and have lost out on receiving your catalog. Kindly send me one by next mail. I have planted your Diamond Joe's Big White seed corn in West Virginia and have found it to give excellent good results.

W. G. WOLF.

Brighton, Tenn., Feb. 9, 1915.

Gentlemen: Please find enclosed order of seed corn. I used your seeds last year and feel satisfied with them. The season was poor, but I had a good stand. If it had been a good season my corn would have been extra fine, especially the Diamond Joe. Please fill my order as early as possible and oblige,

HENRY SCHULTZ.

Poplar Plains, Ky., Jan. 15, 1915.

Ratekin's Seed House: Please send me a copy of your catalog, as I will want some seeds the coming season. I have planted your seeds in the past and they have always given excellent good results.

Very truly,

R. B. YOUNG.

Lockesburg, Ark., July 21, 1915.

Kindly send Winter Seed Wheat folder with prices and descriptions. All the seeds bought of you last spring produced crops that are looking fine. Hoping to hear from you soon, I remain,

Yours truly,

T. W. PARK.

Stigler, Okla., Jan. 20, 1915.

I am enclosing my order for seeds again this year. The Diamond Joe's Big White I got from you last year soars above any corn I have ever seen or grown.

H. S. TURNER.

Bronson, Mo., Jan. 15, 1915.

Please send me a copy of your catalog. I am quite interested in seed corn, grasses, clovers and garden seeds. I have planted your seeds in past years and always found them of excellent quality.

MRS. MARY E. HAWKINS.

Camden, Ark., Jan. 26, 1915.

I ordered some of your Imperial White Red Cob Corn two years ago, and have found it highly satisfactory.

Truly yours,

TONEY SMITH.

Durant, Okla., March 30, 1915.

The seed corn, 27 bushels, I ordered from you has arrived in good shape and is fine.

W. O. SHANNON.

Antlers, Okla., Feb. 10, 1915.

I got some seed corn from you last year and it made a splendid crop, while our native corn was almost a total failure on same ground, and now quite a number of my neighbors are wanting it for seed. In the order I am sending you I have ordered some of Diamond Joe's Big White. It's a splendid corn for old, poor, sandy or hill ground, best I ever seen.

M. J. SULLIVAN.

Scottsville, Ky., Jan. 20, 1915.

Please send me copy of your catalog. I sent to you two years ago for seeds and everything I ordered and received from you did fine and gave excellent and pleasing satisfaction.

Very truly yours,

W. N. KIRBY.

Manhattan, Kan., March 19, 1915.

Enclosed find order for seeds again this year. Diamond Joe's Big White I got from you was about all the corn I have raised during the last two years.

Truly yours,

A. R. MERRITT.

Comet, Va., Jan. 26, 1915.

I have grown crops from your seed corn, also your Red River Potatoes, and have been highly pleased with results.

MRS. JENNIE BELL.

Woodstock, Va., Feb. 22, 1915.

Enclosed find order for seeds. The seed corn ordered from you last year certainly proved a great success. Practically every stalk bore two good ears and about every kernel grew and made a stalk. Sure I am well pleased.

Yours truly,

RAYMOND BUMGARDNER.

121 BUSHELS PER ACRE.

Findlay, Ohio, Feb. 30, 1915.

Last spring I sent to you for seven pounds Diamond Joe's Big Early White, which I planted on one acre of good ground and from it I raised one hundred and twenty-one bushels of fine corn, and can sell all I will have to spare, for seed, at \$2.00 per bushel. I shall want some more seeds for the coming year and will remember to send to you for them.

Truly yours,

H. C. HARDWICK.

100 BUSHELS ON ONE ACRE.

Willoughby, Ohio, Jan. 25, 1915.

I sent to you and got seven pounds Diamond Joe Corn last year, and planted it on one acre of good ground, gave it good cultivation and from it grew 100 bushels. It's without doubt the best corn I ever saw. Now I want some grasses and clovers. Please send me latest prices.

FRED A. ROE.

93 BUSHELS PER ACRE.

St. Charles, Mo., April 19, 1915.

Enclosed find my order for seed corn. If you have nothing better just send Diamond Joe's Big Early White. I planted it last year and it only made ninety-three bushels per acre, which was a pretty fair yield for a dry year.

Very truly yours,

J. R. MCCONNELL.

Janesville, Wis., April 15, 1915.

I received the six bushels Iowa Silver Mine ordered from you all O. K. and have made test; gave 95 per cent good, strong germination and am well pleased. With many thanks for prompt attention, I am,

Yours very truly,

W. C. HUGUNIN.

North Detroit, Mich., Sept. 17, 1915.

Diamond Joe's Big White Corn I got from you last spring is a little the finest corn I ever saw. Please send me your fall catalogue by return mail and oblige,

Yours truly,

GEORGE J. SEIFFERLEIN.

Hilo, Mo., Feb. 5, 1915.

Please send me catalog, as I want to order my seeds from you again this year. The seed corn I got from you last year was fine, and proved the best drought fighter I ever saw.

Yours truly,

JOE STRONG.

Burns, Mo., Jan. 19, 1915.

Enclosed find my order for seeds. Having tried them for several years I cannot recommend them too highly. The PRIDE OF NISHNA CORN, without doubt, excels any other corn I have ever planted and is almost impervious to drouth. All my garden seeds gave equal good satisfaction.

Very respectfully,

MRS. NELLIE EVERLY.

65 BUSHELS ONE YEAR, 81¼ ANOTHER.

Earling, Iowa, Jan. 21, 1915.

I have now been growing your DIAMOND JOE'S BIG EARLY WHITE and PRIDE OF NISHNA for two years with splendid success and results. In 1913 I obtained a yield of 85 bushels per acre from Diamond Joe, and in 1914 I got 1,220 bushels off 15 acres. Pride of Nishna also gave a fine yield, as also did the new Alberta Oats.

HENRY M. HEESE.

Fairburg, Ill., April 1, 1915.

If you have not shipped the seed corn I ordered from you, please add three bushels of DIAMOND JOE'S BIG WHITE to it. I have tested the shipment you first made and every grain grew. Have also tested some my own corn and do not feel safe in planting it.

JOHN H. DARNELL.

Paris, Ill., April 4.

I am just in receipt of your nice catalog for which you have my thanks. I have been planting your DIAMOND JOE WHITE CORN several years, am greatly pleased with it, but since I failed to save my seed last fall will have to purchase my seed this spring.

Very truly yours,

RICHARD VAN GILDER.

Mt. Vernon Ill., March 30.

Enclosed find order for three bushels of DIAMOND JOE'S BIG EARLY WHITE Seed Corn. I wish to say, we have been planting this corn before in this part of Illinois, and find it well adapted to our part of this state.

Truly yours,

ISAAC FELTENSTEIN.

Centerville, Ill., Jan. 21, 1915.

Some years ago my father sent to you for some seed corn, which we found the finest and largest yielder I ever seen. Unfortunately we suffered from an overflow last year which washed our corn crop out and we lost the seed of it and I am sending for some more of the same variety. It was the LEGAL TENDER.

Very truly yours,

FRED S. CRANE.

Pulaski, Ill., Jan. 24, 1915.

A number of years ago my father, C. H. Brown, sent to you for some Diamond Joe's Big Early White, which I have grown ever since, but if you have a bigger eared corn I wish to get some of it. I don't expect anything better than Diamond Joe, for I don't think you have it. Let me hear from you.

F. R. BROWN.

Adair, Ill., March 15, 1915.

Seed corn received and tested, No. 8308; result 96 per cent. This is good enough to plant.

Yours truly,

H. L. MERRILL.

Venus, Neb., March 20, 1915.

Seed Corn received and is certainly much better than I expected. The Sojo Beans are also very nice. I wish to thank you for prompt attention and other courtesies.

Very truly yours,

A. H. BASLER.

Appreciative Letters From Some of Our Customers—Continued

90 Bu. Off One Acre; Got \$2.00 per Bu. for Seed

Schell City, Mo., Feb. 20, 1915.
I am pleased to tell you in regard to DIAMOND JOE CORN received from you. In 1913 I got my first seed from you. It was a bad year. Drouth here was most severe, but I made a fair crop, saving my seed from it and planted it in 1914. On one acre of timber land after it made itself, I went through and counted the ears on one row, and then at another place done the same, and counting 100 ears for a bushel, it made 85 bushels to the acre, but later I shelled some of it and it over-run six to seven pounds more than my estimate; therefore think it made fully 90 bushels to the acre. And the best part of it was, I got two dollars per bushel for every bushel I had to spare. My wife also wishes to say: "Tell Mr. Ratekin my garden seeds grew fine and gave us a splendid garden—best we ever had." Yours very truly,
FINIS CHRISTMAS.

Welty, Okla., Feb. 20, 1915.
Enclosed find my order for seeds again. The DIAMOND JOE Seed Corn I got from you last year done fine—the best corn I ever grew and made an excellent crop. In fact I had to throw a lot of things out to make crib room I had counted on for my crop, something I never done before. My neighbors all, or many of them, have spoken to me for seed. My wife says: "Tell you our garden seeds were fine." ALF HALL.

Breman, Ky., Feb. 24, 1915.
I sent to you for some of your white dent corn last year and it made me the finest, best crop I ever grew. In gathering it I found one ear containing 26 rows. I also ordered some of your Diamond Joe, and it, too, gave me a splendid yield. Yours truly,
A. J. WHITMER.

Moscow, Penn., April 2, 1915.
Enclosed find my order for 10 bushels of your Gold Standard Leaming Corn. I have purchased my seed corn direct from you for the past three years and have always had most satisfactory results. T. H. REYNOLDS.

Monclova, Ohio, Jan. 28, 1915.
I have thus far failed to receive your catalog. Please send me one. I ordered my seed corn from you last year and had splendid results, and want to send to you again this year. Kindly give me lowest prices on the following varieties in 10 bushel lots and over, each.
MAX OLWICK.

Rutherford, N. C., March 4, 1915.
Please send me a copy of your catalog. We have been sending to you for seed corn for several years, and always pleased with results, but failed to get your catalog this year. Rush it along. J. C. GREEN & CO.

Shilo, Ark., March 14, 1915.
The seed corn arrived yesterday in good shape. Enclosed I am sending you another order. Rush it out quick; corn planting time is now close at hand and some are now planting. C. C. McDONALD.

Lyons, Ind., April 17, 1915.
DIAMOND JOE is the "Farmers' Friend" and the best drought fighter I have ever found. We sure had a very severe drouth here last season, but DIAMOND JOE'S BIG WHITE made me 55 bushels per acre, while other varieties made but 15 to 20. It is certainly the farmers' friend. CHARLES ALKIRE.

Superior, Wis., Feb. 20, 1915.
Enclosed find my order for some of your "famous" DIAMOND JOE'S BIG WHITE. I got a small amount of this corn last year and it done fine at Gordon, Wis., and want some more of it this year. People there never seen such corn before. All were pleased and taken with it. Please send my seed corn as soon as convenient, as I like to have it on hand when ready to plant. Truly yours,
PAULINE HANSON.

Boston, Ga., March 21, 1915.
It has been several years since I begun planting your corn—meantime have received no catalog from your house. Please send me one. Also give me prices on DIAMOND JOE. Its the best corn I have ever seen or planted in Georgia—is much earlier than native sorts. W. J. LANE.

New London, Henry Co., Iowa.
Last year was remarkably dry with us, but your DIAMOND JOE'S BIG WHITE CORN DONE WELL—made over 50 bushels per acre, which was good considering the season. Your new Alberta Oats also done fine. I got a yield of over 50 bushels per acre, while no other variety about here made yields of scarcely above 25 and 30 bushels. Please mail me copy of your new catalog as I shall want to send to you for some more seeds for the coming year. T. THORSDON.

Greenwood, Mo., March 29, 1915.
The nine bushels of seed corn was received in good time, 5 bushels Silver Mine, and 4 bushels Reids Yellow Dent, and am well pleased with it. Also wish to thank you for attention you gave my order. T. A. SMITH.

Topeka, Kan., March 27.
I received your catalog a few days ago, and am enclosing my order for 7½ bushels of your seed corn. I sent to you a few years ago for seed corn and it has done well for me, but last year owing to drouth conditions I will have to buy my seed corn this year, and feel safe in sending to you again. Very truly yours,
L. V. HARRISON.

Robinson, Ill., April 2.
Enclosed find another order for seed corn. I received my other order all right and was not only pleased but proud of the seed you sent me. My wife says: "Tell you not to forget to send the Rambler Rose." V. W. JONES.

Boy 12 Years Old Sends Thanks

Moro, Texas., April 2, 1915.
Gentlemen: I am a boy just twelve years old, but I want to tell you I received the seeds you sent me, yesterday, all O. K., and wish to thank you for your prompt attention, also for the extra seeds you put into my package. Very respectfully,
ALTON B. HALE.

Jacksonville, Ark., Feb. 26, 1915.
We received all our seeds all O. K. and wish to thank you for prompt attention. My husband is sure very proud of his seed corn and we hope and expect to obtain a good crop from all of them, one we can write and tell you about after it is made. Yours very truly,
MRS. MATTIE KYZER.

Frost, Texas, Feb. 12, 1915.
I am enclosing my order for some of your IOWA SILVER MINE seed corn. I have planted this corn here before and always made good corn when all other varieties failed, even to make anything. J. F. PAGE.

Citra, Okla., April 4, 1915.
Enclosed find small order for garden seeds, which I wish you to send by return mail, as it is now getting late. I sent to you and got some of your DIAMOND JOE'S BIG WHITE seed corn last year and was greatly pleased with yield and results, considering the drouth we had. It is sure drought proof, at least made from 15 to 20 bushels better yield than any of our native sorts, and I shall plant my entire crop to it this year. J. N. YATES.

Lockport, N. Y., Sept. 22, 1915.
I sent to you last spring for some of your seed corn which proved a wonderful success, and have now received the winter seed wheat ordered from you and am greatly pleased with the fine quality of it. A. J. BLACK.

Spickard, Mo., March 3.
Enclosed find my order for seeds: It's my first order to you, although I have been sending away for seeds to another seed house with very satisfactory results, but my father has been sending to you for a number of years and he speaks so well of his success from your seeds, I am going to give you a trial. He thinks the Seed Potatoes he gets from you beats the beater. Very respectfully yours,
MRS. E. BROWNAWELL.

Old Mystic, Conn., May 1.
The seed corn received and tested, shows a very high test and very handsome. Thanking you for prompt attention. Yours truly,
CHAS. ELDRIDGE.

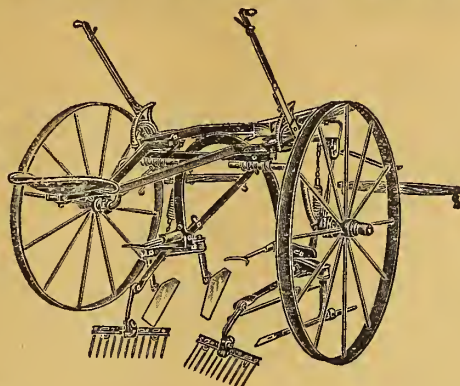
Ocean Co., N. J., Aug. 15.
Please send me your Winter Seed folder with prices and descriptions. DIAMOND JOE SEED CORN I sent to you for last spring is doing fine, shows two well set ears on every stalk and every one is so large the stalk is bending over with weight. I shall want a lot of seeds from you next spring and will be pleased to receive your catalog as soon as in print. Very truly yours,
H. E. GERKIN.

Lyman, Wash, Feb. 2, 1915.
The package of Diamond Joe's Big Early White I got from you last year did fine and although our seasons are not like yours, every ear matured finely. Enclosed find check and order for seeds again this year. Truly yours,
EVERETT REED.

GRAND SWEEPSTAKES PRIZE

A poor, or scrub variety of seed corn means less yield and corn to harvest but no less labor and expense, hence a smaller profit. By poor seed and varieties we do not merely refer to missing stalks or hills, but also to barren stalks. These are really worse than missing, as their pollen will fertilize the good ears and thereby cause damage.

In one corn growing contest we notice where one contestant obtained 126 bushels per acre, while another obtained but 25 bushels yield, but the only difference in expense was the cost of husking at 4 cents per bushel. The way to increase the profit is to INCREASE THE YIELD.



There is no mystery in raising corn. Good seed, good soil and good cultivation at the proper time with the right kind of tools are the important factors. One of the most essential requirements is good seed, seed of inherent qualities behind it, showing its ability to produce larger and increased yields, over the same varieties that have not been improved by careful and scientific methods.

Another of the most common causes of short corn crops is lack of sufficient moisture, but where the soil is filled with humus much of the moisture may be retained by plowing corn often.

The above illustrated, J. D. Towner & Sons Co. \$30.00 cultivator will be given as a prize to the farmer who produces the largest yield from 10 acres of ground planted to any variety of Ratekin's seed corn listed in our annual Seed Catalogue in 1916, conditional that each contestant will be required to purchase at least five bushels of seed corn from us at regular catalogue prices. You may, however, select in such quantity of each or either, not less than one bushel of any one variety, on the basis of our regular five bushel prices. Competition open to everyone, regardless of age, state or locality. All other conditions required—same as provided in Boys' and Girls' Contest, as to measurement of ground, weighing of corn and the furnishing us with not less than ten select ears of the corn, on or before December 1, 1916. (See page 26, this book.)

In regard to the above cultivator which we are offering as a grand sweepstakes prize, would say, we regard this style of a cultivator as the leader in the surface cultivator line, and can recommend it for the most successful results in the cultivation of corn.

How Boys and Girls are Setting the Pace in Corn Growing

The Boy and Girl members of the various contests throughout the country are to be congratulated on what they have accomplished during the past few years. They have by their energy and successful work, given progressive agriculture a great record which others may well strive to equal or surpass, and we are proud to give the results that so many of them have accomplished. They simply show that the boys and girls are leading "Pa" and "Ma" by demonstrating what can be done by those who are interested sufficiently to do their work in a way that will not only produce the greatest yields, but return the greatest profits. What they have done we all can do with great benefit to ourselves, both in the way of larger yields and greater financial returns. If we can produce as much off one acre as we have been producing off two or three acres, or as much off forty acres as the average farmer produces off of eighty acres, we have made a great step in progressive farming. Any farmer worthy of the name certainly aspires to do better work and get better results each succeeding year.

During the season of 1913 the Janesville Gazette of Janesville, Wis., inaugurated and carried through a boys' corn growing contest. In the contest the Gazette offered \$160.00 in prizes which were awarded on the basis of the largest yield per one acre. Forty-seven boys completed the contest, the largest yield being 109 bushels of dry corn. In 1914, inspired by this progressive move of the Gazette, the Commercial Club of the city with the business manager of the Gazette as chairman of the committee took up another boys' corn growing contest. In this contest there were 42 boys that reported, bringing into their place 42 collections of 10 ears of corn each for judging, each grew one acre for the contest. Their reports carefully attested by local representatives showed that on 42 acres the boys had raised 3,752 bushels (75 lb. per bushel), an average of 89.13 bushels to the acre. The largest yield being 132 bushels and 64 lbs., and thirteen of the boys raised over 100 bushels per acre. The smallest yield being ten bushels more than the average of the county, and next lowest 22 bushels above the average.

Alvin Collins of Bellevue, Ohio, won a prize of \$100.00 in 1914 in contest with 91 bushels per acre. Four brothers, members of corn club contest at Macon, Ga., produced 824 bushels of corn on four acres. One of the brothers also won first prize at Georgia state fair for greatest yield from one acre. He produced 227 bushels. In 1914 Carl Graves in Mississippi grew 202 bushels of corn on one acre of ground at a cost of 14½ cents per bushel.

Boys' Corn Club at Texas State Fair, at Dallas, Texas

One of the most enthusiastic meetings of young corn growers ever held in Texas was the visiting Boys' Corn Clubs at the state fair, October 25th. The various clubs arrived early in the morning and marched over the fair grounds with banners proudly flying. The boys were there in great numbers and almost every section of the state was represented. The crowd was called to order and Dr. S. A. Knapp of the United States Department of Agriculture was introduced. He greeted the boys as freshmen in the great school of agriculture, studying how to make the farm produce more. In one county club of 140 members only two boys failed to produce more corn than their fathers, and the fathers of these boys were themselves studying how to grow more corn. J. A. Evans, special agent of the Boys' Corn Clubs in Arkansas and Louisiana, made a brief speech in which he brought greetings from the clubs in Arkansas and Louisiana, and said: "The record of the Arkansas boys was 160 bushels to the acre, and that of Louisiana 160 bushels and forty-five pounds." The afternoon was spent in inspecting the various exhibits. It was a rare opportunity for the boys to see the progress that is now being made in agriculture.—Dallas News.

In 1913 there was raised an acre of corn in Alabama that set the mark worth remembering when we talk of "the corn belt," as Iowa, Illinois, Missouri and Indiana. Walker Lee Duston, "Way down in Alabama," grew 232 5/7 bushels on his club acre that year and was state champion for Alabama in 1913 and 1914. That 132 bushel crop was his third year in corn club work. His first year's work being 75 bushels, his second 100 bushels, and the third the record breaker, made during a year of extreme drought. The fact that superior knowledge of how to handle the soil made it possible for the youngster, then 14 years old, to beat drought and make such a remarkable crop is worthy of note. Cost of producing the crop, \$46.40: value of crop after made, \$209.44; profit, \$163.04.—The Farming Business.

Mr. C. L. Powers' communication in Hoard's Dairyman, commending the boys' corn club work and reciting the yields made by the leading contestants in Will County, Illinois, where the first prize was won by a yield of 109 bushels per acre with other contestants close to the same mark. I am constrained, if you will allow me space, to give a remarkable work this corn club movement is accomplishing in the south. The fact is that comparatively small number of real, wide awake farmers with requisite capital, together with our farm demonstrators and boys' clubs, have opened the eyes of our people during the past few years. Last year the membership of the boys' corn clubs in North Carolina numbered 4,540 boys, of whom 966 had made complete reports when the state report was tabulated. The average yield by these boys was 58.02 bushels per acre, at an average cost of 41 cents per bushel. The three highest records for the year were as follows: Dudley Hall, Sallsbury, 148.2 bushels at a cost of 9½ cents per bushel; Clyde Lenoir, 145.34 bushels at a cost of 19 cents per bushel, and Adolphus Ball of Bahama, 145.05 bushels at a cost of 25 cents per bushel. In 1913 an ever better record was made because of better seasons. The average yield being 62.2 bushels at an average cost of 37 cents per bushel. The three highest yields were 190.04 bushels, 152.3 and 152, by J. R. Cameron of Kinston, Benj. S. McKell of Walstonburg and Wallace Creasman of Biltmore. The cost of these three contestants was 34 cents, 20 cents and 16 cents respectively. To show that the yields mentioned were not isolated cases, eighteen boys in the clubs produced last year more than 125 bushels per acre, while 70 made more than 100 bushels.—North Carolina in Hoard's Wisconsin Dairyman.

How Boys and Girls are Setting the Pace in Corn Growing

MINNESOTA BOYS' CORN-GROWING CONTEST

In Minnesota, in 1914, there were many prizes and premiums offered the boys in state, district, county and local corn growing contests, which has not only put that state into "the corn belt states" but has greatly stimulated corn growing all over that state. For the purposes of the state contest, the state was divided into three main zones, Southern, Central and Northern Zones, as it was considered manifestly unfair to expect the boys in the extreme northern counties to compete on even terms with the boys in the central or southern counties. In these contests there were more than a half hundred boys that came through and won prizes. In reviewing the list we find the competitive yields in the southern zone run from 81 bushels, the lowest, to 105 bushels, the highest; the average being 92 bushels per acre. Central zone run from 81½ to 109 93/100 bushels, the average being 92 97/100. Northern zone from 64 to 106 97/100, average 83 77/100. The interest in the contest was said to be greater than any previous year. The boys took more pains with their work and the enthusiasm was more wide spread. These boys in their reports and stories of the contest show they are not only winning prizes, but are gaining and imparting valuable information, also laying the foundation for successful farmers in the future.

C. Randolph Kahler, of Lycoming County, Pennsylvania, after preparing his ground in good order, planted one acre of corn May 24th, planting by hand 4 grains to the hill; hills 3 feet apart each way; got an even stand; commenced cultivation June 5th, stirring soil 3 inches deep going as near plants as possible. June 12th cultivated again, both ways, so as to level the ground. June 20th, cultivated fourth time with one horse five tooth cultivator, cross cultivated same day. The last cultivation given June 27th and corn thinned to three stalks to the hill, cultivation very shallow. July 9th, wind storm blew over 20 per cent of the stalks, August 20th it was further visited by hail storm, and again Sept. 23 by wind storm that blew a percentage of the stalks to the ground. Oct. 17th corn was husked and weighed in presence of a practical farmer and high school professor and found to yield 132½ bushels per acre.

W. M. Huston, of Carlisle County, Ky., tells us how he produced 204 bushels yellow dent corn on one acre of ground in 1914. He planted and cultivated very similar to the way described above, by C. Rudolph Kahler, did.

Willie Brown of Hamburg, Ashley County, Ark., produced 172 bushels of corn on one acre in 1914, the largest yield reported in that state that year, and exceeded the yield obtained by Burley Seagraves, of Biggers, next highest yield, by nearly 50 bushels.

It is charged that Mississippi is behind in many things pertaining to good roads and agriculture, but I do not think any fair minded man can charge it with being other than as rich a state as the Union can boast in the matter of natural resources. Our delta lands are unequalled in fertility by any in the world and our prairie lands grow alfalfa as well as any of the irrigated lands of the west. Five years ago, when deep plowing was begun, it was discovered that Mississippi was in the corn belt. Of 162 plots of ground planted to corn by the Boys' Corn Club, 66 bushels per acre was the average and 100 bushels per acre was the highest. This year several members of the Club promised to show 200 bushels per acre. Then an enterprising farmer came along and put us in the wheat belt, and now we can show some of the finest wheat fields to be found anywhere, standing 5 feet high, good for 40 bushels per acre.

WHAT DAD DONE: At least one old boy has shown the "famous" young corn growing boys that their dads and grand-dads are able to keep up with the procession when they buckle down and try. This old dad lives in Ohio and is a 63-year-old corn raiser. Last year he lubricated his elbows and with the aid of his gray matter raised 161 bushels of corn on an acre of ground at a cost of \$24.80, which is a little better than some of the corn boys did. His work should be a great comfort to the "dads" of the country who have not been much flattered by comparisons drawn between their corn crops and that of the boys. It won't hurt the rising generation to remember that "dad pays the freight," manages to bring up a crop of smart youngsters and give them an education, is worthy of considerable respect as a raiser of things, including cash.—Better Farming.

GLENN TRAPP: An income of \$800 from two acres within a few months is the record made this summer by Glenn Trapp, a 17-year-old boy living in North Des Moines. The boy, who formerly was a carrier for The Register and Leader, paid for his land with the onions that he raised alone and made a neat sum in addition on other vegetables.

A desire to earn enough money to go to college was the incentive for the venture made by young Trapp. Early last spring he purchased two acres of ground from H. H. Polk & Co., in Beaver Gardens, ten miles north of Des Moines, on the Perry Interurban. The land cost him \$500 and he made the first payments with money that he had earned and saved while carrying papers.

The boy erected a tent on his two acres and lived there during the summer, doing his own cooking and working from dawn till dark on his small farm. He planted the most of his land to onions, also putting in a few melons, potatoes and sweet corn. By thinning out his onion crop early in the summer, he realized early \$60 on young onions. The onions he is now harvesting are recognized by experts to be about the best grade and quality that have been raised in Iowa this year. He is taking out nearly 600 bushels of onions, for which he is receiving \$1 per bushel. His melons, potatoes and sweet corn have brought him an additional income.

Within another year Trapp expects to have sufficient funds to complete a full college course. His success with his two acres is considered an excellent example of the possibilities of intensive farming.—Register and Leader.

CHAMPION TOMATO RAISERS. Mrs. Eloise Parsons of (this) page, Iowa, is the young woman whose record in the Department of Agriculture's garden and canning clubs was the best of the thousands made by members in the 33 Northern States. Miss Parsons obtained a yield of 5,318 pounds of tomatoes from her tenth-acre plat. Her costs were \$15.61 and her net profits were \$115.57. Her costs cover every item of expense in raising the crop, including rent of land, her own time (estimated at 10 cents an hour), fertilizers and sprays.

Another member of the Garden and Canning Clubs in the Northern States, whose work is worthy of special mention is Miss Sara Dickinson of Sharpsville, Pa. She won first prize in her state with a record of 4,966 pounds on her tenth-acre. Her costs were \$12.33; her net profits, \$78.61. It is difficult to compare the profits made by the various young women in the garden and canning clubs, as the market price of fresh vegetables differs very widely in different parts of the country, and a member with a very good crop may sometimes have to sell at a very low price, because of prevailing market conditions.

What a Few of Our Prize Winners of Past Years Said

Reedsville, W. Va., March 25, 1914.

Ratekin's Seed House, Shenandoah, Iowa.

Gentlemen: I am just in receipt of the Gentleman's Gold Watch offered as a premium by you and it was a surprise to me. I had hardly hoped, much less, expected to win this prize. But I want to thank you sincerely for it. It is a dandy and I am very proud of it. I shall always be pleased to speak a good word for you whenever I can. Again thanking you and wishing you every good wish, I beg to remain, with great respect,

Yours very truly,

HUGH BORN.

Hamilton, Mich., April 14, 1914.

Ratekin's Seed House, Shenandoah, Iowa.

Gentlemen: This is to acknowledge with thanks receipt of the Ladies' Beautiful Gold Watch offered by you as a premium. I am greatly pleased with it and all my friends think it is indeed fine. Again thanking you and wishing you good success, I am,

Yours very respectfully,

MRS. ROSE PALMER.

Vicksburg, Miss.

J. W. Ratekin, Shenandoah, Iowa.

My Dear Sir: Yours came just as we were starting for a short visit at Waterloo, Iowa, from which we returned last Wednesday evening. Was much pleased,

of course, both at being adjudged a "good Indian" and at winning the prize—as to which Mrs. Longley played it low down on me by asking before showing me your letter, but after reading it, if she could have the \$10.00 in case I won it. Of course I said "yes," thinking a one in a thousand chance offered great opportunity for cheap generosity. With best regards I am,

Sincerely yours,

C. L. LONGLEY.

Niles, Ohio, Feb. 15, 1915.

I am a market gardener—sent to you last year for seeds. Enclosed find \$1.00 for which send me Magi-Queen Tomato Seed. I think this the best variety in the world. Send parcel post.

JOSEPH MICCO.

Highland, Ill., March 1, 1914.

I sent to you for garden seeds last year and was highly pleased with results from all of them, especially the Magi-Queen Tomatoes. They surely cannot be beat for anything. I got only one pkt. and besides having a sufficient quantity for supplying our family of eight, I supplied friends and my daughter's family, and also supplied some of my neighbors at threshing time; besides this, sold \$21.65 worth late in the season at \$1.00 per bushel. I also took some to our county fair and received first premium on them.

Very truly yours,

MRS. J. GANTNER.

Ratekin's Pure Genuine Alberta, Canada Grown Oats

Send for Free Samples for Comparison if You Expect to Send Away for New Seed

RATEKIN'S
Big Canada

OATS

Make Big Yields and Big Money

The New Alberta Oats

The Biggest, Best and Grandest variety ever introduced into this country. A BIG, HEAVY YIELDING OAT HAS BEEN OUR HOBBY FOR YEARS! WHY? Because, if you have noticed the crop and agricultural reports throughout the United States you have observed that the average yield of oats does not run above 27 bushels per acre. Do you know the reason for this? It's because farmers continue to sow old, run out, degenerated sorts year after year, when it is a well known fact that there is no cereal crop grown that runs out and degenerates as quick as oats.

We have had a thousand farmers write us, when ordering Seed Oats, that they would order enough of the new Alberta, Canada, grown Oats to sow 25, 50 or 100 acres, if it were not for the price.

The facts are: The cost of the seed has nothing to do with it. Any investment that will give you two dollars for one is a good investment, whether it be for Seed Oats, Seed Corn, or for a horse, hog, cow or any other investment. We would be just as glad to sell you our new Alberta, Canada, grown oats at common market price as you would be to purchase them at that price if we could afford to do it. But when we have to employ a competent man to visit and inspect growing crops suitable for seed purposes before and at harvest time, and then remain until threshed, and the seed loaded on cars at a heavy expense; then pay freight from western Canada, 1,800 miles away from Shenandoah; also pay a

premium price to start with, including other incidental expense, it is easy to see we cannot sell these oats at prices of home grown oats. This being so manifestly plain, it is a question that solves itself. As proof of this we have sold more of these oats during the last three years than any other of our other varieties. If you are going to change your seed, why not start with the very best, most improved varieties possible to obtain?

THE COST: The cost of seed is a secondary matter. It's a matter of yield, quantity results and profits on the investment. The cheapest seed oats you can buy costs you from 75 to 90 cents per bushel; they germinate 50 to 60 per cent and possibly, some, 75 per cent, or one-half to one-fourth chaff, hulls or seed that will never germinate; making a liberal allowance seldom ever yield over 40 bushels per acre; thus at best they would produce on 10 acres 400 bushels. Product at 40 cents per bushel brings you \$160.00. Suppose you sow 10 acres of our new Alberta, Canada, Grown Oats, seed that germinates 100 per cent or very close to it, every kernel starting off on a business mission, making a perfect stand, shading the ground with a big, robust growth and foliage that smothers the weeds and grass; and at harvest time produces 90 to 125 bushels per acre, or safely estimated, yields 800 bushels, every bushel weighing 42 to 48 lbs. per measured bushel, worth only 50 cents per bushel; total \$400.00, even for feeding purposes. But you will be able to sell every bushel you raise to your neighbors for seed at \$1.00 per bushel, which means \$800.00 against \$160.00.

The New Alberta Oats—What They Are Like

The illustrations bordering this page are a correct illustration of average kernels of these oats. You will notice they are a big, fat kernel, big enough to please anyone looking for something a little better than anything ever seen in the oat line, and an oat that weighs out almost as heavy as wheat; usually from 44 to 50 pounds to the measured bushel and making a yield of 90 to 125 bushels to the acre. Ripen very early for a large oat. Has a big, strong, stiff straw, standing upon any kind of land, with sprangled head ranging from 12 to 18 inches long, and some even longer.

We can confidently recommend these oats and assure all our customers that they will come up to the full measure of your expectations. In fact, out of the thousand bushels we have sent out **WE HAVE NEVER HAD ONE COMPLAINT OR DISAPPOINTED CUSTOMER.**

EVERY GRAIN GROWING FARMER SHOULD SOW AT LEAST TEN ACRES OF THESE OATS THIS YEAR. Get in shape to grow your own seed another year, and supply your neighbors with their seed.

PRICES: Pound, 25c; 8 lbs., postpaid, \$1.25. At purchaser's expense, by express or freight: Peck, 60c; ½ bu., \$1.00; 1 bu., \$2.00; 2 to 4 bu., \$1.90; 10 bu. and over, \$1.80 per bu. 25 to 50 bu., \$1.70 per bu. Sacks free.

RATEKIN'S SEED OATS

Space will not permit us to tell you here all we would like to tell you about our splendid varieties of Seed Oats. For years we have been known as HEADQUARTERS FOR ALL THE BEST VARIETIES OF SEED OATS there is grown. Last year we sold more than 60,000 bushels of seed oats and out of all these thousands of bushels sent out, we have not had a complaint from anywhere from any cause, but have had hundreds of letters testifying and complimenting our seed and the splendid yields and results obtained.

Oats is one of the main staple farm crops—valuable and profitable from every angle and standpoint, and we might add, indispensable. They are a profitable money crop to grow, if you plant or sow the right varieties of seed. Oats are useful and needful to everyone who has horses, colts or mules and other stock to feed. In addition to this there is always a market and demand for good oats for American home consumption; besides this, MILLIONS OF BUSHELS ARE EXPORTED, and especially since the European war began, the end of which no one can foretell. Oats are also indispensable when you wish to rest or change your land from one crop to another, especially so as a nurse crop when you wish to sow it to grass, clover, alfalfa, etc.; when you wish to get the crop off early for winter wheat or other second or fall crops of quick maturing forage crops. But to make big and profitable yields, SEED OATS, like seed potatoes, is a crop that should be renewed with new seed at least every second or third year, as, grown in the same soil and same neighborhood year after year, they will deteriorate rapidly and soon run out and become light and chaffy. Our prices, being very conservatively low, considering the care and cost of best pure varieties and the increased yields to be obtained, it would pay every farmer to buy new seedstock from us every year.

OUR GROWING DEPARTMENT. We do not want any misunderstanding to prevail as to the growth of our seeds. We do not grow all of them ourselves. This from the very nature of the case would be impossible, but we do grow many and of large quantities of them every season. Our seeds come from all sections of this country and all parts of the world, and it has been one of our special and most careful efforts and duties to select and offer to our customers seeds, after thorough tests, that have proven to be the best for all climates and latitudes. Our long experience and wide acquaintance enables us to know positively as to the best sources of supply. Seeds which we do not grow ourselves are obtained from experts and specialists who specialize on a few varieties. We do, however, grow all seeds, both for the farm and garden, that can best be produced in Iowa. Among the varieties which we do grow under our own personal supervision are field corns, dent corns, flint corns, sweet corns, winter wheat, rye, grasses, clovers, etc., also a number of varieties of seed oats, but do not grow all the oats we handle, as the bulk of our Seed Oats are grown in Canada and the far north and northwest, where they enjoy the best climate in the world for growing all kinds of spring small grain, seeds of which carry their inherent virility, vitality and reproductive power with it when planted or sown farther south and east. Those in charge of this department are men who have had years of experience and are thoroughly posted as to the best place and best methods of securing the best and highest quality of seeds. There is no place or business we know anything about in which knowledge and experience on the part of the purchaser of seeds for a seed house that is so valuable or means so much to the seller of seeds and also so much to the purchasers of seeds as does one who thoroughly understands this business.

Ratekin's Big Banner 100 Bushel Oats

We believe among all that is good "RATEKIN'S BIG BANNER 100 BUSHEL WHITE OATS" to be the best American oats grown and equal to or superior to any oats found in this country. They are big, plump and pretty. Grown side by side with other varieties, they have frequently made a yield of 100 bushels per acre where any other varieties made but 25 to 40 bushels. Hundreds of our customers have written us that on account of their earliness, enormous yielding qualities, freedom from rust and wonderful stiff straw, standing up perfectly under wet weather conditions that caused other varieties to lodge and go down, there was **NONE LIKE RATEKIN'S BIG BANNER 100 Bushel White Oats.** They undoubtedly stand pre-eminently at the head of all American grown OATS.

"Ratekin's Big Banner 100 Bushel" White Oats

are a variety of OUR OWN PRODUCTION, originated BY US UNDER THE SEED PATCH SYSTEM, and are the result of several years of painstaking in the selection and propagating from single select heads which we have developed into the **BEST AMERICAN GROWN VARIETY IN EXISTENCE.** This is a **BOLD ASSERTION,** but is backed up from years of experience of over twenty thousand farmers who have sown and grown them, having sent out over fifty thousand bushels during this time, and out of all we have never had a single complaint, but have had more than a thousand letters from those who have sown them, telling us of the enormous yields obtained, ranging all the way from seventy-five to 140 bushels per acre and extolling them from every standpoint.

DESCRIPTION AND POINTS OF SUPERIORITY: First, these oats have a big, plump white kernel and thin hull. Its quick, strong, robust growth from the start. A shorter, stronger, heavier, stiffer straw than any of the heavier yielding varieties. Its strong, vigorous root system, enabling it to resist dry weather and drouth. Its early ripening and maturity. Its absolute freedom from rust, blight or smut. Its large kernels being solid and full of meat, almost as heavy as wheat, weighing out from forty to fifty pounds per **MEASURED BUSHEL,** combining all the best points and qualities of all the **BEST AMERICAN GROWN VARIETIES OF OATS IN EXISTENCE.**

We can fully recommend these oats to every grain growing farmer, and can assure one and all that you will make no mistake or have no failures in your oat crop when you sow these oats, and I hone every grain growing farmer who reads this catalogue will sow at least a part of his crop to them the coming season.

PRICE: Peck, 40c; bu., \$1.25; 2½ bu., \$3.00; 10 bu. and more at \$1.10 per bu.

SEED OATS.—For a number of years farmers of the middle west have had the doctrine of good seed corn brought to them by every farm paper in this country. We believe in good seed corn and good farming, but this question presents itself, why not more agitation for good seed oats? We all know that proper selection of seed corn is helping to increase the yield of this grain. Why not apply the same principle to the oat crop?

There are many varieties of oats at the present time. For large yields, select a variety that has a strong, stiff straw, and a large, well branched head, with plump, white grains. One should not be governed by the rank growth of straw as many times the heavy straw oats yield the least.



I threshed 105 bushels of your Big Banner Oats from one acre with 2½ bushels of seed I got from you last spring—the finest oats I ever looked at.
JOHN T. SIBLEY, El Paso County, Colo.

Seed Oats—Continued

SPECIAL NOTE TO BUYERS OF LARGE QUANTITIES

To those desiring to purchase large quantities of Seed Oats, Seed Corn, Wheat, Rye, Barley and other grains, Grasses, Clovers, Alfalfa, and other grasses and clovers. Also forage and other varieties for general farm purposes, we would ask that you make out a complete list of each and all and send to us for special prices. Upon receipt of same we will be glad to quote you prices either f. o. b. Shenandoah or shipped to your station.

Ratekin's New Kherson Oats

Without a Spot. Without a Blemish. Without a Flaw.

The New Kherson Oats are without a doubt—without a comparison—the best Extra Early Oat that has ever been introduced into this country. Best in every respect. They are the earliest to ripen. They are the most productive. They are rustproof. They are of medium short, stiff, strong straw and stand up on the richest of land. They are not affected by dry weather, as other varieties are. They make themselves early in the season while the moisture and strength remains in the ground, before dry weather sets in. They yield more per acre than any of the later, larger varieties. They always make a big, certain crop, regardless of wet or dry weather, if your ground is properly prepared, as it always should be for any kind of a crop, from mustard seed to the corn crop. Nothing but a hailstorm will prevent you from securing a good crop, a 100 bushel per acre crop if you will do your part.

This new, valuable, early Oat was first discovered by Prof. Taylor, who was superintendent of the agricultural department of the great World's Fair at St. Louis. It was while he was making a journey through Russia for the United States in search, and to secure certain grains, in the province of Kherson, Russia, in the year 1900, that he came across this Oat.

We take the following description and tests from Bulletin 82 of the University of Nebraska, Prof. Taylor, Superintendent of the Farmers' Institute of Nebraska:

"This Oat has proven itself of such outstanding merit in tests at this station and among co-operative experimenters that it deserves special mention. The Oat was obtained of the Kherson government, where the variety originated. A description of the soil and climate of that region will serve to explain why the Oats are so well adapted to this region, where they are raised without irrigation. The Kherson government of Russia lies in the Black Earth region, which is very similar to that of our own Great Plains. Climate is similar, also, but possesses even greater extremes of heat and cold, and is more uncertain as to rainfall.

"The average rainfall for May, June and July, the three wettest months in Southern Kherson, is about 5.5 inches, and the average rainfall for the year is 16 inches. This feature corresponds with similar features of climate in Nebraska and Kansas, but the entire annual rainfall is much less than in this country. At North Platte, Nebraska, the annual rainfall is nearly 20 inches. In Southern Kherson, where the Kherson Oat originated, the climate is very much dryer than in Nebraska as far west as North Platte. The variety, therefore, ought to be adapted to a large portion of Nebraska." (These Oats are a success anywhere Oats are grown.)

"The plant is vigorous, but not a rank grower. The straw is short, and on the same land stands shorter than other Oats tested at this station. The leaves are very broad and expose a large surface. The panicles are spreading. That is, it is a side Oat. The berries are light yellow in color; small, but numerous, and have a very thin hull. They usually weigh well per bushel, and in this respect, as well as in yield per acre, they have led all other varieties at this station.

"It is peculiarly suited to Central and Western Nebraska on account of its habit of growth. Although it usually yields well in Eastern Nebraska, there are other varieties that in the river countries at least compare favorably with it. West of that, the tests that have been made of it indicate that it is earlier, yields better, and weighs heavier than any other variety with the possible exception of Texas Red Rustproof, which Oat is not so salable on account of its color. It has steadily outyielded the Texas Red on the station farm. In the dry season it showed remarkable drouth-resisting qualities."

Correct Illustration of Kherson O

Sow two bushels per acre where press drill is used; broadcast two and one-half bushels per acre. This amount gives best results.

The Kherson Oats were first introduced through the Nebraska State Experimental Station in 1901 and were tested out there thoroughly, side by side, under identical conditions with a large number of others of the best varieties in 1902 and again in 1903, producing and showing a larger yield than any other variety tested with them, each of the two years; the Texas Red Rustproof being their closest competitor, but showing $6\frac{1}{2}$ to 7 bushels less per acre than the Kherson. The report further states:

"There were a number of other Oats in this variety test, but we give only Kherson's nearest competitor. In the spring of 1901 seeds of Kherson Oats were sent out to a number of persons in the various parts of the state to test. This was repeated in 1902 and 1903, as more seed became available, and the results of the three years' tests are now at hand. We regret that we are unable to give this table in full on account of the lack of space, but will say there are reports from forty-one Nebraska counties, of which more than 90 per cent show a much better yield, earlier, better weight per bushel and freer from rust than any other Oat tested."

A good idea is obtained of what the Kherson Oats look like from the accompanying illustration. It will be noticed that the heads have fine, large sprangled full heads, which frequently have 100 to 125 seeds on them. We can confidentially and unhesitatingly advise and recommend to our customers to sow liberally of them. They have stood the test now for the past fourteen years, which has been unparalleled by any other Early variety of Oats that have ever been introduced into this country. Owing to their great vitality and tenacity they are adapted and succeed over a wider range of territory, latitude, climatic conditions, soil and seasons than any other variety known or grown, in existence. Within the past six years we have sold and sent out more than 100,000 bushels of these Oats and have never had a complaint from any source, but hundreds of letters from our customers extolling them to the skies. We sell more of them than any other variety except our new Alberta, Canada, Grown Oats. They give big yields and it's the last 20, 30 and 40 bushels on top of a medium, or ordinary crop that makes Oats a paying crop. Besides this they are Early, ready to thresh and feed before ordinary varieties of Oats are ready to cut, or when they are heading out. It should be largely planted the coming season; thus insuring a crop that escapes the rust period—saves the risk of windstorms, hailstorms and bugs.

Our Seed of this variety was secured from Seed of the original Taylor importation, and is absolutely pure Kherson Oats, and is choice stock.

PRICE: 1 bu., \$1.10 per bu.; 5 bu. and over, \$1.00 per bu.; 10 bu. and over, 95c per bu.; 20 bu. and over, 90c per bu. Bags free, f. o. b. Shenandoah.

The New Kherson Oats is all you recommended them to be—iron clad. My crop made seventy-six bushels per acre the past season and ripened two weeks ahead of earliest varieties in this vicinity.

LIVINGSTON COUNTY, ILLINOIS, OCT. 30, 1911.

SAMUEL S. SEMELROTH.

Kherson Oats have given the largest yields each year for four years past at the Iowa Agricultural College at Ames, Iowa, and fully two weeks earlier.

OATS

SEED OATS—Continued

In bushels and value, oats ranks fourth as a staple crop. Iowa is the banner state in the production of oats as well as in the production of corn. In 1914, when crops of all kinds were bountiful throughout the corn belt states, Iowa produced one hundred and sixty-three million bushels of oats, twenty-seven million bushels more than any state in the Union, Illinois being its nearest competitor. This was considerably more than a million and a half

bushels for every county in the state, and almost one hundred thousand bushels for every township; yet, with the proper preparation of the ground and a change to the best, most improved varieties, this enormous showing could have easily been doubled.

Oats is a crop that is absolutely indispensable to the prosperity of the American farmer, for many reasons. It is not only an imperative commodity as a food for both man and beast, but as a rotation crop nothing takes its place. Meantime it is not appreciated as a money crop in this country as it is in older countries; nor does it have anything like the attention it does there. In fact, in these older countries much more careful attention is given to varieties and quality of seed than in this country, where, we are sorry to say, oats are sown and grown more as a makeshift than the profit there is to be derived by proper attention. In Germany, notably, as well as in Sweden, Russia and numerous other countries Oats is one of the most important crops grown, and on land that has been in cultivation 500 and 600 and 1,000 years they are producing two to three times as many bushels per acre as we are in this country, on practically virgin soil, capable of giving much larger yields than is obtained in any of these old countries. **WHY IS THIS?** It is because they give much more and better attention to improving and improved varieties and cultivation than we do in this country. With the same care and attention here that is given there, **OUR OAT CROP COULD BE MUCH MORE THAN DOUBLED.**

In making up our list of Seed Oats this year we have discarded all the common, old, run out varieties and are listing only the cream of all the best improved varieties, and if you fail to find some **HIGHLY ADVERTISED** varieties, you may know they are not worth growing, and **YOU**, our customers, will find all the best and most improved varieties there are grown or offered anywhere, also just what we have represented them to be. Read over descriptions of different varieties; select whatever may seem best to meet your requirements, purposes and locality, and let us have your orders, and you may depend upon receiving the best quality and grade, and of pure stock.

Ratekin's Regenerated Swedish Oats Imported

Pure, Genuine, Canadian Grown Imported Regenerated Swedish Oats

Canada for many years has produced the best oats in America, both as regards yield and quality of the grain. We have secured this year, a quantity of Canadian Grown Regenerated Swedish Oats. These were originally quite a late variety, made early by growing in the high altitude in which they were developed. They are an improved strain of the Swedish Oats we have been offering for several years.

The Regenerated Swedish Oats are extremely early, and in yield superior to the Swedish. We know of instances where 110 to 120 bushels per acre have been harvested under favorable conditions. Under ordinary growing conditions, however, a yield of 50 to 75 bushels is quite certain.

The quality of the grain is also superior to the Swedish, the kernels being more plump, and very heavy. The Regenerated Swedish Oats we are offering have been bred to such a high state of perfection as to produce usually three kernels in a pod, this fact being largely responsible for the heavy yield. We recommend sowing 2½ bushels per acre. These Oats will do remarkably well on rich land, providing a thoroughly worked seed bed is prepared and a uniform seeding is made. **PRICE:** ¼ bu., 50c; 1 bu., \$1.60; 2 bu., at \$1.50; 10 bu. and over at \$1.40.

Swedish Select Oats

Originated in Sweden, was distributed by the U. S. Department of Agriculture. All the Experiment Stations and the U. S. Department of Agriculture commend them highly. Prof. Carlton at Washington says: "Now probably the best American Oat." Prof. Moore, of Wisconsin, who has been largely responsible for their introduction, found them the most satisfactory of 36 varieties after testing them four years. He says: "They are especially well adapted for the upland soils and do better on poor land than any other variety."

The great root development is one of the characteristics of the Swedish Oats, which enables them to resist drought better than any other variety tested. The straw is coarse and is noted for its stiffness and power to resist lodging.

These oats are quite early, less liable to smut and rust than most other sorts, and thrive on nearly all soils, and under almost all conditions. **PRICE:** Peck, 40c; bu., \$1.35; 2½ bu., \$3.15; 10 bu., \$11.00

Improved White Russian Side Oats

IMPROVED WHITE RUSSIAN OATS. The original stock of White Russian Oats was a capital oat, and sprang immediately into great favor. It is quite distinct from most other varieties, being a side or horse mane oat. We now offer White Russian Oats grown in North Dakota in its old time purity. White Russian is as nearly rustproof as any oats can well be. It is a good yielder and quite hardy. On account of its ability to withstand unfavorable weather will be found very satisfactory. Pound, 20c; by mail, postpaid; by express or freight, ¼ bu., 40c; bu., \$1.00; 10 bu. and over, 90c per bu. Bags free.

NO EXTRA CHARGE FOR BAGS TO HOLD SEED GRAIN, AS THEY ARE FURNISHED FREE.



Pure Regenerated Swedish Select Oats.

Ratekin's Texas Red Rust-Proof Oats

The Best Oats Grown for the South; and a Good One for the North, East or West

The Texas Red Rustproof Oats were originated in Grayson County, Texas, one of the central northern counties, abutting southern Oklahoma, some twenty years ago, where they, at first, made a most phenomenal record as being absolutely rustproof, as well as a marvelous yielding variety.

We do a large and extensive seed business throughout this wonderful state, an empire of itself, and have visited that state, and especially the eastern half of it, many, many times during the past fifteen or twenty years. Some ten years ago, when in Grayson County, our attention was brought to these Oats, also one of the finest fields of oats our eyes ever rested upon anywhere in the South. This was about harvest time, and all other fields and patches of Oats surrounding it, in that vicinity, were struck with rust, crinkled down and destroyed by rust and blight, and were left unharvested, being worthless. In view of this and after careful investigation, we decided to purchase a carload of these Oats and ship them to Iowa for seed, which we did; bought 1,800 bushels, a big carload. This was an experiment, but we had faith in them and believed they would and could be improved by a change of climate and soil, as Oats are and can invariably be improved by a change from one locality, latitude, climate and soil to another, and realizing this and the great success these Oats were making there under the hot, scorching sun of that climate, that they would do even better here in a cooler climate on our strong, rich Iowa soil. As a result we realized the full expectation of our prediction and fondest hopes. Since then we have grown them here very extensively, purchasing back new seed from our customers, who purchased their seed stock from us, and grew them in Nebraska, Colorado, Kansas and Missouri, and in this way we have kept our seed stock up to the highest standard. In the Northern states these Oats can be sown earlier than any other Oats or spring small grain, as they are much harder and more impervious to cold snaps, frost and freezes in the spring than other spring varieties. In the South they are usually sowed in the fall, with great success, also during the early or middle winter up to the last of February, and even to March 1, but early sowing as a rule does the best. Fall or winter sowing does remarkably well where the ground does not freeze over four or five inches deep. They, however, have been known to go through the winter safely at points where the weather went to the zero mark at periods.

We can unqualifiedly recommend these Oats as being among the best of the best varieties, hardiest, productiveness, and surest croppers under all the varied conditions. Since these Oats have been grown here in the north, they have become more hardy and vigorous than the same variety grown in the mild climate of the South and give very much better yields and results than the southern grown, both in the North and in the South.

While we are not a knocker, we may be allowed to say that from reports that come to us, if true, more than 75 per cent of all the Northern grown Texas Red Rustproof Oats sold and sent out for seed are more or less mixed with other varieties. With us, however, we have always been extremely careful in handling our seed crops, and our stock may be depended upon to be absolutely pure. As their name implies, they are absolutely rustproof; besides, they ripen and are ready for harvest fully two weeks ahead of ordinary medium varieties, thus escaping storms and other unfavorable conditions. You can have them threshed and be feeding them before late varieties are ready to cut.

DESCRIPTION: The Texas Red Rustproof Oats are not a handsome oat to look at, but what they lack in beauty they abundantly make up in certainty of crop and yield. They grow to medium height, $3\frac{1}{2}$ to 4 feet tall, have a sprangle head well filled with grains, often running 100 to 125 kernels to the head; also a splendid stooker. The grains or kernels are of a yellowish-red cast, with a husk extending well out over the tip ends, hence do not weigh out quite as heavy per measured bushel as some other varieties, but easily make up this difference in bushels. In brief, we can most heartily recommend these oats and their adaptability to any place where oats are grown, and especially recommend them to our Southern friends and customers. **PRICE:** 1 to 10 bu., \$1.00 per bu.; 10 bu. or over, 90c per bu.

Ratekin's Early Champion Oats

Early Champion Time tried, thoroughly tested and always a sure cropper. They are an old, well established and well known sort. Every farmer knows what to depend upon when he sows them, namely: they can always be relied upon for a large yield and a sure crop. In fact, the **IOWA EXPERIMENTAL COLLEGE** recommends them very highly as among the best yielders and as the best for spring nurse crop to grass and clover. They grow a short, very stiff straw, always stand up well and ripen very early. Wallace's Farmer says: "We would rather risk growing grass with Early Champion and Kherson Oats than any other varieties known or grown." **PRICE:** 1 bu., 90c per bu.; 2 bu., \$1.70; 10 bu. or over, 80c per bu. Bags free.

Sixty Day Oats The Sixty Day Oat is certainly a very valuable variety. It is giving satisfaction over a wide range of territory, is yielding right alongside of any variety, is at least two to three weeks earlier, gets ahead of the rust and hot winds, and when oats must be used as a nurse crop is decidedly a splendid variety for this purpose, as it grows 6 inches to 1 foot shorter than ordinary varieties. It frequently happens that farmers can get this oat on the market fifteen days earlier than any other variety and get several cents per bushel higher price on this account. The original seed of this valuable oat was secured in Russia by the United States Department of Agriculture in 1902. Some of this seed was sent by the Government to the South Dakota Experimental Station and that institution in its Bulletin No. 96 makes the following report: "With only two exceptions, every farmer to whom we have sold this oat is still growing it and is much pleased with it. In North Dakota the 60 Day Oat has headed the list of varieties under trial for the last three years. It is a small, yellowish oat that weighs about 34 pounds a bushel. The hull is very thin, being easily shelled in threshing."

The Sixty Day Oat has made a fair crop when other varieties failed entirely. It is so early that it may be harvested with barley, and is three weeks ahead of most other sorts. It has averaged 40 to 60 bushels to the acre in recent seasons on the same ground on which other varieties failed almost entirely. The average yield of Sixty Day Oats at the Minnesota Experimental Station has been 64 bushels an acre. It must be borne in mind that some years have been very unfavorable and that the yield in 1908 was only 41 bushels an acre, which was larger than any other variety grown on the station grounds. This is not a side oat. **PRICE:** By express or freight, bu., \$1.00; 2 bu., \$1.90; 10 bu. at 90c per bu. Bags free.



Early Champion Oats

Ratekin's Giant White Hulless Barley

Some of its valuable properties: It's hullless; it is beardless; it yields good crops on poor land and enormous crops on strong ground; weighs 60 to 64 pounds to the measured bushel; it is of inestimable value to everyone who feeds stock of any kind. It ripens very early; it makes better pork than corn. It's sure a very profitable crop for every farmer to grow.



White Hulless No beards or hulls. The grain looks like wheat. Equal to wheat in feeding value, and will yield twice as much. No barley of which we have knowledge has proved as valuable to the stock raiser as the Improved White Hulless. It is not a malting variety, but for feeding purposes there is no barley raised which can compare with it in earliness, yield and quality.

The grain is exceedingly heavy, weighing from 60 to 63 pounds to the measured bushel. The yield varies according to soil and climatic conditions, but it can be depended upon to produce from 50 to 80 bushels an acre. Its nutritive value is very great. It is fed to work horses at the rate of two quarts where four quarts of oats would be required. The best way is to mix it with oats and grind the two together or soak six hours in water for horse feed. It is also very valuable for feeding poultry, hogs and all kinds of stock. As fattening feed for hogs it has no equal. It makes sweeter meat and nicer lard by far than corn.

It is often grown for hay, coming very early and providing rich feed. It should be cut just when in the milk for hay and while the straw is green. In this condition it is relished by all kinds of stock. The straw is stiff and straight and seldom if ever does it lodge.

There is positively nothing in the world that will give to your cattle better health and add to their weight quicker than the feeding of Giant White Hulless Barley. Indeed, feeding them twice daily on Giant White Hulless Barley and once on corn will add more fat and better fat, and add it quicker and for less money than feeding on corn alone. We know this to be true, because we have demonstrated it repeatedly.

PRICE: Postpaid, by mail, 1 lb., 25c; 3 lbs., 60c; 7 lbs., \$1.00. By freight or express, at purchaser's expense: Peck (12 lbs.), 75c; ½ bu., \$1.25; 1 bu. (48 lbs.), \$2.25; 2 bu., \$4.25; 5 bu. and over, \$2.00 per bu. Bags included, f. o. b. cars here.

Ratekin's White Hulless Barley

A GREAT MONEY MAKER for the FARMER. THE HEAVIEST CROPPER KNOWN. THE EARLIEST, STRONGEST STRAWED AND PLUMPEST BERRIED SORT KNOWN. THE GRANDEST AND BEST YIELDING BARLEY EVER INTRODUCED IN THE UNITED STATES.

A CHANGE OF SEED TO THIS VARIETY WILL MORE THAN DOUBLE YOUR FEEDING CROPS.

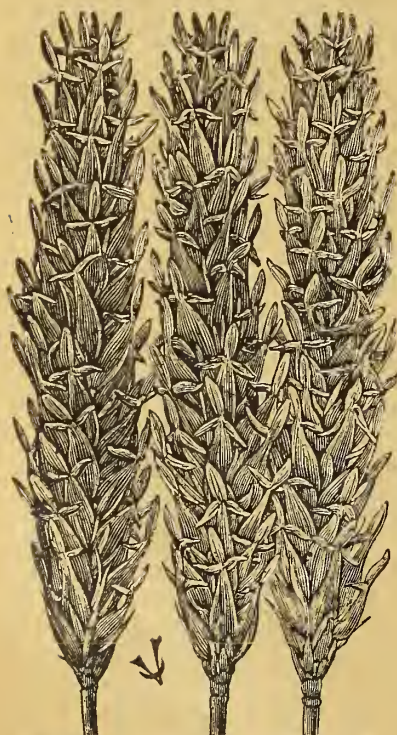
IT CAME OUT ON TOP IN A COMPARATIVE TEST OF THIRTY-SEVEN VARIETIES.

Ratekin's Success Beardless Barley

This is a new six-rowed barley, and as the name indicates, without beards, which is the most valuable improvement ever made on barley. It is a vigorous grower, producing strong, short straw and heavy, well filled heads. Its earliness is one of the most important features, as it can be cut and put out of the way before the wheat and oat crop is harvested. On good land it has produced 80 to 90 bushels per acre, and as much as 125 bushels in favorable seasons. In regard to soil, it is not particular, as a good crop of beardless barley can be raised on land too poor to produce a crop of wheat or oats. It is a first-class malting barley, and equally good for feeding stock, therefore always bringing the highest market price. It should not be mistaken for the beardless hulless barley which is described above on this page, and which is grown for feeding purposes only. Ever since this grand new barley was introduced, there has been such a demand for it that we were always short in supplying our trade, and we anticipate another great rush for it this year. Peck, 50c; bu. (48 lbs.), \$1.60; 2½ bu., \$3.75; 5 bu. and more, \$1.50 per bu., sacks included.

Ratekin's Manshury Barley

This grand barley was introduced from Asia by the Ontario Agricultural College several years ago, and is, beyond doubt, one of the most valuable varieties ever introduced into this country, greatly out-yielding the renowned Manshury Barley. It is an early six-rowed variety, maturing in 80 to 90 days from time of sowing, and is adapted to all kinds of soil and climate; is very strong strawed, stools well, and bears large and well filled heads of plump grain, which possess malting qualities of the highest order. Another important factor is its nice and bright color, which will not turn dull and yellow when exposed to rainy weather, as most other varieties do, and on this account it will always be in good demand by the brewers and commands the highest market price. A good malting barley always sells for at least ten to fifteen cents more than discolored and which can only be used for feeding purposes. By growing the Manshury instead of some common variety, one can easily gain from \$5.00 to \$10.00 per acre. 1 lb., 25c; 3 lbs., 65c; postpaid, peck, 45c; bu. (48 lbs.), \$1.50; 10 bu., \$14.50.



Ratekin's Success Beardless Barley.

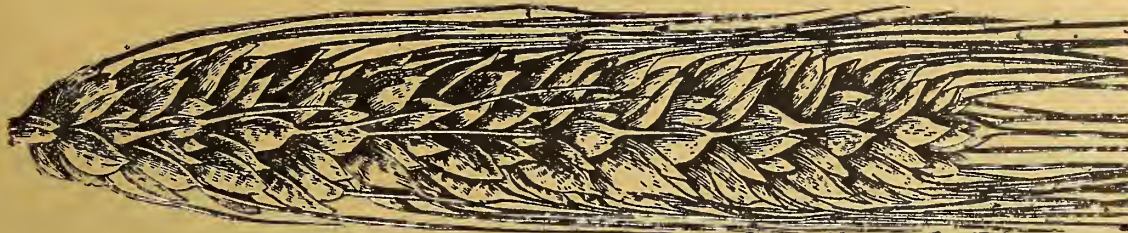


Manshury Barley.

Barley—Continued**A GRAND 6-ROWED BARLEY****ODERBRUCKER OR WISCONSIN NO. 55 BARLEY**

We presume that more barley is produced per acre in Wisconsin than in any other locality. The reason for this is evident. In that state are located the largest breweries in the United States, if not in the world. On account of barley being one of the staple crops, the State Experiment Station of Wisconsin has given particular attention to the breeding of barley to obtain big yields. Qualities are essential for both brewing and feeding purposes. Odebrucker or Wisconsin No. 55 is considered the best variety of barley sent out by the Wisconsin Station. Prof. Moore declares it to be superior to Manshury, yielding 5 to 10 bushels more an acre. The original stock of this barley was obtained in Germany, by the Ontario Agricultural College, from which place the Wisconsin Experiment Station procured a small supply. By them it was disseminated. Odebrucker is a stiff-strawed, heavy yielding, six-rowed, bearded variety. It is the same as Manshury in time of maturity and general appearance, but has a plumper kernel and weighs more to the measured bushel. "In stiffness of straw and rust resistance it is superior to any other variety."

It has protein content nearly double the amount of protein found in many other varieties. This makes it a valuable feeding barley, which is an important consideration with the leading farmers and stockmen, who are now appreciating more the value of barley as a feed for all kinds of stock, horses as well as cattle. On account of its large percentage of protein, it is also one of the best malting barleys. **PRICE:** Pound, postpaid, 20c; by express or freight at purchaser's expense, 1/4 bu., 55c; bu., \$1.60; 2 bu. at \$1.50; 10 bu. at \$1.40. Bags free.

Speltz or Emmer

SPELTZ IS THE GREATEST SMALL GRAIN CROP GROWN; IT HAS TEN THOUSAND POINTS IN ITS FAVOR AND NOT ONE BAD ONE. IT RESISTS DROUTH; IT THRIVES ON POOR LAND, ON STONY GROUND, IN FOREST REGIONS, ON THE PRAIRIES; IT MAKES A CROP WITH ALMOST ANY CONDITIONS OF SOIL AND CLIMATE; IT ENDURES A GREAT DEAL OF FROST; IT IS NOT READILY DAMAGED BY HARVEST RAINS; IT DOES NOT RUST, BLIGHT OR SMUT; YIELDS MORE THAN WHEAT, OATS OR BARLEY; MAKES BETTER FEED THAN OATS OR BARLEY; RIPENS VERY EARLY.

What is Speltz? This question has been asked us a thousand times during the past ten years. **SPELTZ IS A CEREAL—A SMALL GRAIN CROP TO SOW.** It has **TEN THOUSAND POINTS IN ITS FAVOR AND NOT ONE BAD ONE**—Is good for everything any other cereal crops are. It's good for pasture; fattens in the green state. It makes the best of hay. It grows a 100 leafy stalk from one seed. It's the most profitable hay and grain food combined on earth. It will grow anywhere that any other grain crop will. It's the greatest drouth resister in the world, never yet affected by rains. It neither rusts, blights or lodges. It matures earlier than oats or spring wheat. It yields 10 to 20 bushels more per acre than oats; it's equal to corn, barley, oats or rye as a food. Hogs squeal for it; cattle bawl for it, and horses neigh for it. One farmer said: **"IF YOU SOW SPELTZ FIVE YEARS YOU CAN WEAR DIAMONDS, and your wife CAN WEAR SILK AND SATIN,** and when your friends come to visit you, you can take them out in an automobile; yes, and take a trip around the world if you want to. It's the surest crop ever planted. It yields enormously. It's the richest food out. For fattening cattle and swine it can't be beat.

We endorse Speltz without qualification. When we tell the farmer it's safe to sow Speltz anywhere in the United States, he believes it. We know whereof we talk. We farm ourselves. To make farming pay one must be alert and awake. We try every seed under the sun. Speltz surprised us; it completely captured us. Now, if you have an acre of land upon which you wish to grow 40 to 80 bushels of rich cereal food and four tons of rich straw hay, then plant 80 lbs. of Speltz.

We want especially our customers in the dry regions of the West to plant a great plenty of Speltz, for them it is of the greatest value, for there are very few plants that are so well adapted to the arid zone as this grain. Speltz withstands the drought, the hot and dry summer, and even when barley falls entirely, it will yield a big crop.

It's the Richest Stock Food That Grows

How nature takes care of man! Just look at it! Several years ago the fattening of hogs in the Dakotas, Montana and the North was thought impossible. Then came Beardless Barley and Speltz and Earliest Corns! These are things which make it possible to fatten hogs anywhere on earth, and do it as cheaply, if not cheaper and better, than with corn alone! Speltz is a richer food than corn. For fattening cattle and swine it is unapproachable. It cannot be beat. **It fattens.** It does this easily and well, and makes the best kind of pork and beef, and so cheaply! You can grow it anywhere; where wheat or oats grow, Speltz will also thrive. Try it this year and be happy. Everything eats it and grows healthy, hearty and fat. Try it this season. It will surprise and please you. Try Speltz, Rape, Billion Dollar Grass and Earliest Cane, and you have the greatest foods on earth.

Culture of Speltz is simplicity itself. It's sown in the spring in the North; in the fall, winter and spring in the South. Prepare your ground as you would for wheat or oats and sow at the rate of two bushels or 80 lbs. to the acre. Cut when in the milk and it will make a splendid hay crop. For grain crop cut when ripe and thresh same as other small grain. It is extremely hardy and can be sown earlier than spring wheat or oats, a light freeze or frost will not affect it. Speltz is one of the things we delight in urging you to sow. You will never regret it, when once you sow it. We have made our prices lower than ever before; we want every farmer who receives this catalogue to try 10 or 20 bushels; the more, the better pleased you will be. **PRICE:** 1 bu. (40 lbs.), \$1.50; 10 bu. or more, \$1.40 per bu. Bags free.

Curve, Va., Aug. 5th, 1915.

Gentlemen: The Speltz that I ordered from you last spring did fine. It's sure all O. K. Now I want to know more about your Giant White Hulless Barley. Please also give me prices on Winter Sand Vetch and Red Top Grass Seed.

J. LOGAN SMITH.

Ratekin's Mammoth Spring Rye

I want to tell you something about Spring Rye, and that is: "It's a money maker in the fullest sense of the word! The yield is always big and the demand for same growing with each season. Ratekin's Mammoth Spring Rye would be ashamed of itself to yield less than 40 bushels per acre—and at that yield 10 acres would pay you handsomely."

This magnificent Rye is of recent introduction. It is distinctively different from Winter Rye, but can be successfully grown anywhere Winter Rye is grown and fills every requirement of Winter Rye, but should be sown only in the spring. It has proven to our farmer customers a sure money-maker, a big money-maker and an easy money-maker, as good Spring Rye brought as good price as wheat and yielded from 10 to 30 bushels per acre more. The price is seldom below 80c to \$1.00 per bushel, while the yield rarely falls below 40 bushels per acre. We have but a few hundred bushels of this Rye, and we request our farmer customers to order early, as it is the early bird that catches this Rye, as later on in the season it will surely be sold. It can be sown at the same time when Spring Wheat is sown, at the rate of two bushels per acre, if sown alone, but it is much used as a forage crop and grown together with vetches and oats. It can be sown later than other spring grain and on that account it is much used as a catch crop where winter grain has been killed out.

Ratekin's Mammoth Spring Rye is more productive than Winter Rye, and the grain is of finer quality. Our seed is grown on our own farms and not bought in the open market; we can therefore vouch for it to be Genuine Spring Rye. Many have been disappointed in receiving Winter Rye as a spring variety, and we wish to emphasize the fact that we sell the genuine Spring Rye, sown in the spring and harvested the same season. **PRICE OF RATEKIN'S MAMMOTH SPRING RYE:** Pkg., 10c; lb., 30c, postpaid; by freight, peck, 60c; bu., \$1.85; 2 bu. or more at \$1.75 per bu.

Ratekin's New Mammoth Wonder Winter White Rye

Mammoth Wonder White Rye We consider winter white rye one of the most important of all farm crops. In the first place, it is a sure crop, failures being unknown. Every farmer should have at least a few acres of it. It is sown in the corn, before the plows, at last plowing, also later, as late as November 1 in the fall, and as it grows vigorously will furnish pasture till late in the fall and early winter, also early in the spring before grasses have made a growth. So, it is of great value to dairy farmers. If sown early in the spring it makes an early and abundant pasture, but makes no grain crop. Our Mammoth Wonder Rye is of extra quality. It will please you, no matter whether you want it for pasture or grain. Grown for grain alone, it will make money for you. Fifty bushels per acre have been procured. **PRICE:** Peck, 40c; bu., \$1.50; 2 bu. or more, \$1.45 per bu.; 10 bu. or more, \$1.40 per bu.

Ratekin's Spring Seed Wheat

The Cost attached to the production and procuring of Pure High Grade Seed Wheat, including the cleaning and grading, and expense attached to it in its preparation for "SEED" than anyone who has not had experience could possibly appreciate; therefore we are obliged to ask and sell our Seed Wheat at a considerable advance over market prices, marketed for milling purposes, which does not require absolutely pure stock and varieties. Considering these facts, we believe that farmers who want to purchase and procure seed wheat, or want to make a change, will find it very much to their advantage to purchase their Seed Wheat from us. We at least hope you will give us a trial.

Sow Only Pure-Bred Varieties All reliable authorities agree that pure, well bred seed produces from five to ten bushels better yield per acre under ordinary conditions than mixed or mongrel varieties, and it always commands from 5 to 15 cents per bushel more on the local market than mongrel sorts, simply because there is that much difference in the markets at the great milling centers.

Iowa Chief This variety of spring wheat has been selected and bred by us and our seed stock grown under our own personal supervision until it has attained such a high standard and quality that we feel justly entitled to give it a distinct name and brand. All who have seen this wheat, both the grain and the crops, while growing, compliment us on its superior quality and yield, also fine appearance. It is as nearly pure as wheat can be and by cross breeding we have produced one of the most vigorous strains of spring wheat we have ever seen, which goes far in increasing the yield, its early maturity and reducing the damage by rust, bugs and storms. It is a hard bearded variety, the kind that produces the best milling wheat and finest flour that can be made, as well as the most pounds of flour to the bushel. In addition to this, it is adapted to any locality where spring wheat can be grown.

PRICE: Pound, mail, postpaid, 20c; 3 lbs., 50c. By express or freight, purchaser's expense: Peck, 65c; bu., \$2.10; 2 bu., \$2.00 per bu.; 5 to 10 bu. and over, \$1.90 per bu. Bags free, f. o. b. Shenandoah

Ratekin's Big Red Fife Spring Wheat This is the wheat used in the Orange Judd Farmer contest of 1906, and is stock selected by Prof. Shaw and the Orange Judd Farmer and American Agriculturist as being the purest and healthiest stock of hard wheat to be obtained anywhere at any price. It is the wheat that made Minneapolis flour famous and is undoubtedly the finest stock of milling wheat in existence.

PRICE: Same as Iowa Chief.

Minnesota No. 163 Fife Wheat Of the many crosses obtained within the past twelve years, the one sent out by the station as Minnesota No. 163 takes a high rank. The heads are long, well filled with medium sized, plump kernels. Flour made from this variety shows a higher gluten test than most sorts. The straw is medium height, very strong and wiry. At the station farm this variety averaged two to five bushels an acre more than the Fife and Blue Stem varieties. The average yield of Minnesota No. 163 Wheat for the past thirteen years has been 26.4 bushels an acre. This tells a story which should interest every intelligent grower of spring wheat. Our crop was grown in North Dakota on land which had not grown wheat for a number of years, and is pure.

PRICE: Same as Iowa Chief.

Minnesota No. 169 Blue Stem Wheat In this we offer the second new wheat originated at the Experiment Station. It is a progeny of Haynes' Blue Stem. Its average yield for four years as compared with the parent variety, is given by the Experiment Station as follows: Haynes' Blue Stem, 22.5 bushels an acre; Minnesota No. 169, 28.3 bushels an acre.

This comparison with its parent, which is a superior variety, tells the whole story as to yield. This is the best Blue Stem Wheat of which we have knowledge. It has given an average yield during 14 years, through favorable and unfavorable seasons, of 26.7 bushels an acre. No better wheat for Minnesota and the Dakotas is grown. In quality it proved in milling tests equal to the best. This variety has no beards.

PRICE: Same as given above for Iowa Chief.

OUR VARIETIES OF WHEAT ARE THE MOST PROLIFIC AND THE QUALITY OF THE SEED EXTRA CHOICE. THEY WILL ANY OF THEM PLEASE AND PAY YOU TO SOW.



Iowa Chief Spring Wheat.

Ratekin's Macaroni or Durum Wheat

MAKES GREAT YIELDS: ONE FARMER GETS 71 BU. PER ACRE; ANOTHER 62 AND ANOTHER 52.

Macaroni Spring Wheat Grand Macaroni. The wheat that defies rust, that fearful scourge, Marvellous Macaroni! The wonderful wheat defying all climates and climatic conditions, disease, insects and rust; yes, everything, a yield bordering on the marvelous. **Macaroni, or Durum Wheat; a Great Drought Resister; Rustproof.** Sent out by the United States Department of Agriculture, under strong recommendation as to its great value for semi-arid land where good crops of spring wheat cannot be grown or produced under ordinary conditions, and it has more than justified every claim made for it. Yields 50 per cent greater than any other variety of wheat. Many farmers report enormous yields. One writes: "I obtained 62 bushels to the acre, another 71, another 52, another 48 and another 49." It is always a sure cropper everywhere and will mature in a shorter period than any other variety of spring wheat. It is especially adapted to the Dakotas, Minnesota, Iowa, Nebraska, Colorado, New Mexico, Kansas, Oklahoma, Texas, and Arizona. It does well on poor land and gives enormous yields on good soil. The grain is very hard and closely woven, translucent, and rather large. Heads bearded, compactly formed and well filled. It should be sown as early in the spring as conditions will permit.

This Wheat especially comes into play in the dry, arid, alkali, hot regions of the United States. Take the Dakotas and Western Nebraska and Kansas and Colorado and Montana and Arizona, Wyoming and Texas—in fact, in any of these states and every other state of the Union, this Wheat can be grown and will return yields far beyond the average spring or winter Wheat known today. On our own lands we have repeatedly had from 40 to 60 bushels per acre. It does magnificently in Texas, and a large number of our customers have grown it in that state. In Dakota and other states, where it has been grown in Russian settlements for 12 or 15 years, also also in Nebraska and other western states, it is ground in the local custom mills for flour, and no other will be used when once tried. It is a wheat that gets along with less moisture than any that we know of, and the yield is always good. It will do well in any state of the Union, though it is best adapted to soils rich in humus and containing a good portion of potash, phosphate and lime. The U. S. Department of Agriculture says that the Macaroni Wheat stands foremost among all wheat groups in its excellent adaption to regions of intense heat and drought.

The straw is strong and healthy, seldom troubled with any of the insects and diseases that affect other wheats. **Rust is also unknown on Macaroni Wheat;** it is indeed the only wheat that defies black rust, that fearful scourge that did untold damage to the wheat fields of Minnesota, Dakota and the great Northwest. Yes, it defies everything, diseases, insects, unfavorable climatic conditions, and gives a yield that astonishes everybody, bordering on the marvelous. Macaroni is a very hard wheat and when it was first begun to be grown in this country the big mills of the country discriminated against it, because they could not get enough to justify a grind, but since this wheat is being grown extensively all over the wheat growing districts the big mills are anxious to obtain it in preference to hard Minnesota spring wheat, and it now commands a premium of 5c to 10c per bushel over No. 1 Minnesota hard spring wheat, and even reached the price of 18c per bushel over No. 1 Minnesota hard wheat; during the winter of 1915, at Omaha, Minneapolis and Chicago. Seedsmen everywhere were compelled to advance their prices for seed to \$2.50 to \$3.25 per bushel. It is a sure cropper and a great money-maker everywhere.

Macaroni Wheat has compactly formed, bearded heads; the grain is large, hard and glossy, of yellowish color, often translucent. The grain being very large and not stooling very heavily, $\frac{1}{2}$ to 2 bushels are required to sow per acre. There are many kinds of Macaroni Wheat, only few possessing good milling qualities. Kubanka No. 5639 is the richest in gluten, and wheat of this variety sells in the milling markets at a premium over and above No. 1 hard spring wheat.

PRICE: Pound, by mail, 25c; 3 lbs., 60c. By express or freight, expense of purchaser: Peck, 60c; $\frac{1}{2}$ bu., \$1.00; 1 bu., \$1.95; 3 bu., \$1.90 per bu.; 10 bu. and over, \$1.85 per bu. Bags free.

Marquis Wheat The King of All Spring Wheats

Remarkably Early, Exceedingly Productive, Unexcelled in Milling Quality

Pronounced by Farmers and Millers the Finest Spring Wheat for the Western Territory.

It is ten days earlier; produces 10 bushels more per acre; has a higher milling and baking quality than any other Hard Spring Wheat known today

The Wheat that won the \$1,000 prize at the New York Agricultural Exhibition for the best wheat grown on the continents of North and South America.

It combines all the qualities so earnestly sought after by the cerealist and devotedly hoped for by the grain growers of the West.

Origin Marquis Wheat was originated by Doctors Charles and William Saunders of the Central Experiment Station, Ottawa, Canada, by crossing the Red Fife and the Hard Calcutta, a native wheat of India which had become acclimated to northern conditions. The first experiments were conducted in 1886, and it was not until 1903 that it was fully developed. By scientific cross breeding a variety was produced that inherited the remarkable earliness of the Calcutta and the resistant and yielding qualities of the Red Fife. The original stock of seed was very small, but by careful husbandry the amount was gradually increased so that it might be disseminated throughout America.

A Prize Winner Marquis Wheat won the One Thousand Dollar Prize offered by Sir Thomas Shaughnessy for the best wheat in America, at the New York Grain Exposition in 1911. It also won the Three Thousand Dollar Prize at the International Dry Farming Congress at Lethbridge, Alberta, in October, 1912, in a competition open to the whole world. Marquis Wheat was again successful in winning the Sweepstakes prize at the Dry Farming Congress held at Tulsa, Okla., in 1913.

Earliness Marquis Wheat is ten days earlier than Red Fife, and this fact alone should induce many of our customers to grow it this spring. Read what Mr. James Austin says about earliness and what it means to the wheat grower at a time when rust, smut, drought or hot winds may take his crop at any time. These ten days may save his entire crop from loss.

Productiveness Marquis Wheat has outyielded all other Spring Wheats grown under the same conditions of soil, cultivation and climate. The increased yield varies from 5 to 10 bushels per acre. Mr. Charles Vandenhoeck of Bozeman, Mont., secured a crop of 52 bushels to the acre on a 10 acre field of Marquis Wheat in 1913. The fields from which our seed was grown in Canada produced 5,150 bushels on 100 acres. A five year average yield at the Brandon Experiment Station was 44 bushels per acre.

Quality Marquis Wheat has by numerous milling tests shown a higher percentage of gluten, a better color, greater absorption and heavy weight per bushel of grain. This question of quality is of great importance to the wheat grower when he comes to dispose of his crop at the mill or elevator. Almost without exception, Marquis Wheat will grade No. 1 Hard.

Appearance Marquis Wheat is similar in appearance to Red Fife, but the heads, as a rule, are heavier and the straw shorter, making it less likely to lodge. The kernel is flinty, a little darker in color than Red Fife, being dark red, and more plump than that variety. It is beardless, having smooth, yellow chaff. It weighs from 64 to 66 lbs. to the measured bushel.

Canadian Grown The seed we offer this year was raised in Canada on new land. Being raised in the far north, this wheat has all the inherited tendencies of that locality, earliness, hardness and productiveness.

Price We have made the prices very reasonable, \$1.00 per bushel less than last season. Considering the increased yield, finer quality and earliness of Marquis Wheat, the first cost of the seed is returned many times over in the additional value which may be secured for the crop. Our prices include bags. $\frac{1}{4}$ bu., 75c; bu., \$2.25; 2 bu. at \$2.15; 10 bu. at \$2.10; 50 bu. at \$2.00. Write for special prices in larger quantities.



Ratekin's Hardy Northern Grown Winter Seed Wheat

Prize Winners: Malakoff, Kharkov and Turkey Red

RATEKIN'S HARDY NORTHERN GROWN FULTZ

SOW ONLY PURE-BRED VARIETIES.



A Photograph of an 80-acre field of Ratekin's Malakoff, yielding 62 bu. to the acre, grown in 1912 by John McLaren, Fremont County, Iowa. Another Fremont County farmer grew 1,192 bu. on 20 acres, same year; average, 59½ bu..

PLANT FOR Big Crops, BIG YIELDS, BOUNTIFUL CROPS and Profitable Returns.

There is no more important or profitable crop to the farmer than winter wheat, if the farmers and wheat growers would give more careful attention to varieties and quality of seed they sow, also careful preparation of soil, they would find winter wheat growing one of the leading money crops of the farm. Those who now obtain but 15 and 20 bu. per acre would find it most profitable and remunerative if they would make a change to some ironclad hardy variety, adapted to the changes and rigor of cold, dry weather in the winter and freezing and thawing weather in the spring, they would find it easier to grow 30, 40 and 50 bushels per acre from good, strong varieties of winter wheat, than it is to grow 15 and 20 bushels, and thus double and treble their profits. It's profit that counts. If fifteen bushels per acre pays expenses only when you can grow 40, 50 and 60 bushels of winter wheat you have a profit of \$20.00 and \$30.00 per acre on your \$150.00 acre land. Hundreds and thousands of farmers who have grown our improved varieties of winter wheat during the past ten years have obtained 20 to 40 bushels per acre, more and many of them have sold the product of their crops for \$1.25 to \$1.50 per bushel and upwards to their neighbors, supplying them with new and improved seed stock; thus making it mutually profitable on both sides.

CHANGE YOUR SEED WHEAT NOW

Iowa State College Experiment Station, Ames, Ia.
Gentlemen: Have just finished compiling data of winter wheat. We find the New Malakoff furnished by you came first in yield among ten varieties grown here. Sowed 1½ bushels to acre, good stand; 93 per cent plants came through the winter strong and vigorous.

L. S. KLINCK.

Illinois Agricultural Experimental Station,
Urbana, Ill.

Yours of the 12th inst. at hand. The Malakoff among the best varieties and largest yielders on our plots this year.

ALBERT N. HUME.

Nebraska Agricultural Station, Lincoln Neb.

Replying to yours of recent date, would say the Malakoff gave excellent satisfaction. As regard yields, one the best of four or five varieties tested.

T. L. LYEN.

RATEKIN'S NEW PRIZE WINNERS, MALAKOFF and TURKISH RED, stand first and at the head of all

H. M. COTTRELL, Agricultural Commissioner, says: "Well bred seed wheat is hardier and will stand greater extremes of drought, cold and flood than mongrel wheat. Where wheats are mixed and grown together the mongrel or bastard strain predominates, and flour made from such wheat the world over lacks strength." "Heavy seed wheat has given increased yields per acre over light seed at all experimental stations." "Plump, heavy seed produce strong, vigorous plants, and the more unfavorable the conditions the better the odds in favor of the well graded, heavy seed."

"Every farmer, every business man, the newspapers of every wheat growing state, farmers' institutes, banks, commercial clubs, millers and grain shippers should join in the movement to get every bushel of wheat sown this year **PURE BRED AND SEEDED IN PROPERLY PREPARED GROUND.** If everyone will take hold it will add millions of dollars to the value of the wheat crop."

Ratekin's Pure Genuine Turkey Red

It is again with pleasure that we present and offer this grand, tried and tested variety of wheat to the farmers of this country. It, like Ratekin's Malakoff, is of Russian origin and was the variety that first made Kansas, Nebraska and Iowa the famous banner winter wheat growing states of the Union, and has proven the greatest acquisition to the American wheat growers everywhere, introduced into this country. Prior to the introduction of this wheat into this country, such a thing as growing winter wheat successfully was unknown to the farmers of Iowa, Nebraska, Northern Illinois, Wisconsin, Minnesota, Dakota, Montana and farther north. To prove the great blessings this wheat has brought about it is only necessary to call attention to the fact that prior to its introduction into Nebraska less than 17 years ago, that state produced less than 1,000,000 bushels of winter wheat per year, while the state of Iowa produced less than 600,000 bushels of winter wheat, whereas Nebraska now produces close to 70,000,000 bushels annually and stands second as a winter wheat growing state, while Iowa, the great corn state, is chasing close after Nebraska in growing winter wheat, all of which has been made possible by the introduction of hardy Russian varieties imported into this country. In addition to the extreme hardiness and productiveness this wheat is of the highest milling qualities and commands an advanced price over soft wheat in all the big milling markets of the country. At the Iowa Agricultural College it showed the enormous yield of 58 bushels per acre.

Ratekin's Northern Grown Fultz Wheat

is the best and heaviest yielding and most dependable, standing out pre-eminently at the head of all the beardless or soft varieties.

WRITE FOR PRICES ON WINTER WHEAT, OATS, RYE, GRASSES, CLOVERS AND OTHER FALL SEEDS AFTER JULY 1.

hard varieties. All are extremely hardy, and will resist more unfavorable conditions than any varieties in existence. They will do well anywhere rye will succeed.

RATEKIN'S NEW MALAKOFF. Imported by the **RATEKIN'S SEED HOUSE**, from Russia in 1902 and harvested our first crop in 1904. In 1907 it made the enormous yield of 60 bushels per acre, and the following year from twenty acres of measured ground it threshed out 1,192 bushels, or an average yield of over 59½ bushels per acre, proving the highest yielding hard wheat ever grown in this country.

Gasconade County, Mo.

The seed wheat I got from you two years ago made the best crop of wheat I have ever grown. It made 60 bushels to the acre. If any of your customers have grown a larger yield than this, please let me know who, when and where. Send me samples of any new importations you have made, as I wish to place an order with you at once.

Respectfully,

AUGUST F. HOCH, JR.

Ratekin's Superior Buckwheat

Buckwheat Is a "catch crop," easily grown between regular succession crops. Also valuable as a weed exterminator and green manure. It will grow the best on light soil, and it will flourish under greater rainfall than other grains. As a second crop Buckwheat cannot be surpassed.

HARVEST WINTER WHEAT OR RYE AND SOW BUCKWHEAT. GET TWO CROPS IN ONE SEASON.

Ratekin's New Giant Japanese Buckwheat

We want to urge and beg farmers to plant more buckwheat. It pays, it pays handsomely. Buckwheat will even do well on lands low in nitrogen. Buckwheat pays everywhere, on any kind of soil, rich or poor. Try it this summer.

Ratekin's Japanese Buckwheat The famous distinct variety. Entirely distinct from all other varieties. It has the advantage of remaining for some time in bloom and produces seed earlier. On this account it can be grown farther north. It resists drought and blight. The seed is rich dark brown in color and larger than Silver Hull. As much as 60 bushels to the acre have been harvested of this variety, making it very profitable to raise. Buckwheat is now sold at 50 lbs. to the bushel. $\frac{1}{4}$ bu., 55c; bu., \$1.75; 2 bu. at \$1.65; 10 bu. at \$15.00. Bags free.

Silver Hull Buckwheat This valuable variety originated abroad and is a decided improvement on the old black or gray sort. It is early, remains longer in bloom than other sorts. A fine variety for honey bees. The grain is of a beautiful light gray color and has a thin husk. Millers prefer Silver Hull, there being less waste and it makes whiter, better and more nutritious flour than other varieties. Silver Hull is more productive and the grain meets with a more ready sale, bringing higher prices than the Japanese. Under favorable conditions it will yield 40 to 50 bushels an acre. By freight or express, not prepaid, peck, 55c; bu. (50 lbs.), \$1.75; 2 bu. or more at \$1.65; 10 bu. for \$15.00.

New Calcutta Buckwheat This variety comes from India and rivals the celebrated Japanese Buckwheat in productiveness, yielding 74 bushels per acre. Its kernels are smooth and fine, and it is in great demand as a milling buckwheat. Pkg., 5c; lb., postpaid, 30c; by freight, peck, 50c; bu., \$1.75.

We Love to Get Letters Getting letters and opening the mails is our daily pleasure. There is a mystery about an unopened letter. Who is it from? What do they want? What does it contain? What shall I say or do to answer it? We never receive a letter or inquiry but what we answer it, by a personal letter, or otherwise make some suitable acknowledgment of it. It is a large part of the day's work to read and ponder over the letters and inquiries that are made and come to us. Some of these letters are complimentary and make us feel good to read them and to pass them around to the heads of the different departments. This makes us all feel good. Others are letters of criticism; some constructive criticism, but often containing suggestions that are helpful to us in stimulating better and incidentally more efficient service than ever before. Others are severe and unkindly criticism, by persons of an inflammatory disposition and spirit. But they are all welcome, as they are all an aid and helpful in assisting us to better please all our patrons and customers, if possible. Then we have another class of letters which are often very touching to the heart. They come from those who have met misfortunes of one kind and another. Some of them tells us of these things and some of them even mention their domestic trouble or of some wayward child upon whom they have placed their heart, hopes and affections. We well remember, out of other similar cases, one, an old gentleman, some years ago, who resided more than a thousand miles away, but who had been one of our regular customers every year for a number of years. One day we received a letter from this old Christian gentleman (we are sure he was a Christian gentleman, for one not a Christian could not have written such a letter). In his letter was enclosed a \$5.00 bill, with his story. He said he had been bereft of all his family, wife and children, except one son, who was verging on to manhood. Despite all his efforts, he said, "he has contracted some fast and giddy associations. He is more than usually smart and bright, but I cannot interest him on the farm or in agriculture, and I want you to sit down and write him a letter; tell him you have incidentally heard of him as being bright and aggressive and that you are very anxious to get your seeds introduced into that locality, and that you want to send him about \$5.00 worth of seeds of different kinds to experiment with. They will cost you nothing, except to pay the freight on them," and ask him if he will plant them and try to grow a record crop from them—something he could call to the attention of his friends and neighbors." We did this just as the father advised and requested. By return mail we received a nice letter, written and composed in a highly intelligent manner and a beautiful handwriting. In it he replied in the affirmative and in a very enthusiastic spirit. It's needless to say that the seeds went forward promptly, and in another letter we advised him about planting and cultivating the seeds and crop. This was the last we heard until in the following fall he wrote us, saying the crop was made, which came out better than anything in the neighborhood, and bearing many thanks. About the same time we received a nice letter from the old gentleman, his father, saying, "It solved the problem. It done what I had never before been able to accomplish. It took the boy's mind off his associates and associations and changed the whole trend of his thought and conduct, and I want to thank you a thousand times for the good your letters done my boy." This is a literally true statement and fact.—J. W. R.

Now, to you, fathers and mothers: We want you to get your boys and girls interested in our Boys' and Girls' Corn Growing Contest. See pages 26 to 32 for full information.

Testimonials

Below and on the following page we print a few testimonials, and excerpts from letters received from pleased customers, and only regret that space will not permit of many more of the same kind. **But if we were to undertake to print all we have received it would fill a book as large as our entire catalogue.** We are, however, always pleased and feel grateful to our customers for their letters. In fact, we solicit them, and would appreciate any good photographs of either farm crops or of vegetables obtained from any seeds sent out by us, also photograph of yourself, with brief, concise statement of your experience, time and manner of planting, cultivation, also time of maturity, when crop was harvested and result of yields, compared with other sorts and varieties, and any other suggestions you may wish to make. We like to hear from our friends and customers at all times, also at any time when we can be of service to them in any way.

Oats B. F. Tongier, of Tangier, Ind., says: "I received the Seed Oats April 14. They are fine—am well pleased. Enclosed find order for 4 bu. Diamond Joe's Big White. Send at once or return money."

J. W. McDonald, of Comanche, Okla., says: "Enclosed find order for Garden Seeds. My oats and seed corn, previously ordered from you, came through flying. The oats were indeed the finest I ever saw. I showed them to several of my neighbors and they said they were excellent, and expressed regrets that they did not send with me, but a number of them had been fooled in ordering seeds from other firms and did not want to take chances again. I hope to receive the garden seeds as promptly as I did my seed oats and seed corn. Wishing you much success, I am,
Yours truly,



This is Larger than the Common Variety.

TESTIMONIALS—Continued

Oats Gentlemen: Please send me a copy of your seed catalogue. I have tried your seed oats and have found them to be the finest there is grown. I shall want some seed oats, seed corn and vegetables the coming season.

Very truly,
JOHN RUSSELL, Darnis, Mo.

W. J. Flatt of Newbern, Tenn., says: "Herewith find order for seeds and money order to pay for same. A few years ago I bought a fine lot of your Northern grown Texas Red Rustproof Oats and they did so well that the farmers all over this section are now planting and growing them."

John E. Adcock of Green Briar, Tenn., says: "I have received my seeds I sent to you for, all O. K. The Oats were the finest I ever seen."

J. M. Trout of Buffalo Springs, Tenn., says: "Seed Oats ordered from you have arrived O. K. I think them the best lookers I ever seen. Allow me to thank you for promptness; got them much quicker than I look for or expected."

J. M. Christine of Limon, Colo., says: "I am enclosing a list of seeds that I want and would like you to quote me and give best price. Six years ago I sent to you for some of your Northern grown Texas Red Rustproof Oats, and I obtained such splendid results from them I want to try them again. They proved especially suited or adapted to this dry country."

Richmond, Mo., Feb. 2, 1915.

Dear Sir: Enclosed please find draft for 10 bushels of your Texas Red Rustproof Oats. This is the second time that I have ordered these oats from you. The oats I received the other time sure did fine. They were the talk of this county and were heavier in weight than all other oats around here.

Yours truly,

J. S. MOYER.

Miller City, O., April 1, 1915.

Gentlemen: The oats bought from you two years ago, Albertas, were fine. Sold 200 bushels for seed this spring, to neighbors. If you think it safe to send seed potatoes ordered, let them come forward. It's dry and dusty here, but ground is yet cold.

Yours truly,

JOHN M. FRYE.

Spottsylvania, Va., March 11, 1914.

Gentlemen: I have your 1914 catalogue and intend to order some seeds from you, but wish to inquire about some that I have in view before making my order. If I can succeed as well with these crops as I did with your Diamond Joe's Big Early White I will be more than pleased. Since I introduced this corn here, it is being planted and grown by all our leading best corn growing farmers in this section. In short, it has proven a great success with us.

Truly yours,

ROLLAND R. MASON.

Speltz I sowed ten acres of Speltz this season from seed purchased of you, and am more pleased with them than any other grain raised on my farm.

L. R. WALKER, Page County, Iowa.

I purchased one bushel of Speltz which yielded 33 bushels from one-half acre. This year I got 250 bushels from five acres. I am led to believe that it is the best spring crop the farmer can raise; oats or barley will not yield by ten bushels per acre as much. I am speaking for my state, Ohio. All other seeds I purchased from you I found true to name and yielded big crops. Hubbard Squash was extra fine; muskmelons were fine. Paul Rose, I think, is one of the best for gardeners.

JOHN H. HEMPY, Bellefontaine, Ohio.

Gilead, Neb., Feb. 10, 1912.

Send me your seed catalogue; also prices on seed oats in fifty bushel lots and over. I bought seed oats from you before and was pleased with the results, and for this reason would be glad to have your best quotations and lowest prices on oats.

Respectfully,

GEORGE MASSING.

Ratekin's New Alberta Oats

We are often asked: "How will your Alberta Oats do for this latitude or locality?" Perhaps we have answered this question a thousand times, always advising that they will do better, give you a larger yield and a superior quality of oats than any native American grown oats in existence. We sold a carload of these oats, 1,500 bushels, to a dealer in New York State a few years ago. After purchasing them and shipment was made he began to advertise them and show them. "Expert" competitive seedsmen told their customers so many frightful tales about seed oats grown so far away from that part not doing well, a failure, advising and warning them against sowing oats grown 3,000 miles away, in the Northwest, that our customer became frightened, asked to have his order cancelled; said, owing to doubts of farmers, he did not believe it possible to sell them. But his car was on the way and we could not stop it, and he had to accept it; and when he found he was in it, he went to work, on the advice and positive assurance we gave him, and as a result he sold every bushel of them at a price more than twice as much as any of his competitors were selling native varieties at, selling every bushel of his seed, after which, he wrote us that he could have sold another carload if he could have obtained them in time. When harvest was over he again wrote us that the ALBERTA OATS produced yields double that of any of the native

varieties. This instance exemplifies all we claim, namely, "The farther north seed oats are grown, the better the crop and larger the yield."—RATEKIN'S SEED HOUSE.

T. B. Baker of Hereford, S. D., says: "I sent and got a small amount of your new Alberta, Canada, Oats three years ago and planted them, but the weather was so dry I did not expect them to make anything. However, they done exceptionally well and I continued to plant the product each year for two years; every year they showed their superiority over other varieties. I am greatly pleased with them—do not think they can be equalled or beaten by any variety I have ever seen."

The oats bought of you made good. We have just threshed from sixteen acres 1,310 bushels, machine measure; weight 42 lbs. to measured bushel.

SAMUEL GLASGOW, Livingston County, N. Y.

My oats stood 5 feet high; made 80 bushels per acre; were the admiration of the surrounding country. The heads measured an average of 12 inches.

E. J. BROWNING, Franklin County, Vt.

From the 26 acres of oats (50 bushels of seed) we threshed 2,190 bushels, and every bushel will weigh out 40 to 46 lbs. per bushel. I never saw anything like them in this country.

JOHN E. DIFFENBAUGH, Monroe County, N. Y.

The oats I bought of you last spring proved all you claimed for them. They stood 5 feet high and were as even over the top as water in a pond; never saw anything like them in this country. The straw was strong and stiff, standing up well. They made 96 bushels per acre, the weight being 43 lbs. per measured bushel. Will want some of your Pride of Nishna and Iowa Silver Mine seed corn in the spring.

A. M. GROVER, Bucks County, Pa.

The oats stood up to my chin and yielded 60 bushels per acre.

B. F. HULSE, Mercer County, N. J.

The oats ordered from you simply done fine; made an average of 125 bushels per acre. Please send me sample of your New Malakoff Winter Wheat and your wheat catalogue. Very truly yours,

W. A. OSBORN.

Boone County, Ky., Oct. 9.

Gentlemen: I received the oats I ordered from you, and they are fine. I am now sending you an order for some Early Ohio, Red River grown seed potatoes. I could get what they call Early Ohio, Northern grown, here, but they don't look good to me, and will send you an order for them.

Truly yours,

JOHN MENTZER, Spencer, Neb.

Received seed oats all O. K. March 26, and find them A No. 1. Am well pleased. Accept thanks for your prompt action. I remain, yours truly,

JOHN SEARSON, Ada, Ohio.

I should have advised you before this that my seed oats arrived in good time and fine condition. Also that I was greatly pleased with the quality of them.

Truly yours,

O. E. DEWEY, Mansfield, Pa.

The seed came to hand promptly and I thank you for the way you do business. I also received your letter with remittance and refund on overpayment, which was very much unexpected, but must say it gives me pleasure to do business with people like you. I want to try some of your New Malakoff wheat this fall.

L. D. PRICE, Wakarusa, Ind.

A Campaign for Pure Seed Oats

The extension department of the Iowa State College at Ames has been engaged in a most vigorous campaign in giving demonstrations among farmers in treating seed oats for smut. Reliable tests last season showed that at least eight per cent of the oats is rendered worthless on account of the presence of smut. This loss amounts to hundreds of thousands of dollars the state over. It is an awful penalty to pay for careless indifference. The formalin treatment should be vigorously applied. This is easily done. The formalin may be bought at any drug store at from 50 cents to \$1.00 per pint, and that will do for treating about forty bushels of seed. General directions for the treatment of seed oats are as follows:

To one pint of formalin, which should be bought in sealed bottles to insure its being full strength, add 40 gallons of water. Mix thoroughly and apply to the seed oats. This amount of solution being sufficient for forty bushels of seed.

Spread the grain on a floor, or in the bottom of a wagon bed. Use a common garden sprinkler to put on the solution and sprinkle until wet, mix the grain with a shovel and sprinkle again. Every grain must be thoroughly wet with some of the mixture or the smut will not be killed. After sprinkling, put the grain in a pile and cover with blankets or sacks for 10 to 12 hours, or over night. This will kill some smut which otherwise would not be touched. Spread the grain out and sow as soon as sufficiently dry.

The matter of good seed is too important to be ignored. Because your seed oats may look fairly well is no sign that smut is not present in sufficient quantities to greatly damage the crop. "An ounce of prevention is worth a pound of cure." The use of formaldehyde does both.

TESTIMONIALS—Continued

Ratekin's Big Banner 100 Bushel Oats

I have never seen or grown anything in the oats line so pleasing and satisfactory as your Big Banner White Oats. They are early, stand up well on the strongest, richest ground and outyield ordinary varieties more than two to one, and superior in quality as well as in every other respect. Made me yield of 111 bushels per acre the past season.

JOHN C. CLINGMAN,
Fremont County, Colo.

I think RATEKIN'S BIG BANNER OATS ahead of anything I have ever seen in the oats line. Made 96 bushels per acre, big, fat kernels, and weighed out 48 pounds to the measured bushel.

SAMUEL J. TILTON, Lawrence County, Kan.

The Big Banner Oats did fine. Threshed 100 bushels from two bushels of seed bought from you last spring.

J. M. BURBANKS, Clayton County, Iowa.

I trust you will be pleased to know that I sowed the ten bushels of Big Banner 100-Bushel Oats in good time and on strong land, on four acres, and from them I have just threshed 425 bushels of the finest oats I have ever seen. Every bushel is equal to the sample and seed you sent to me. I sure have no kick coming, but feel under many thanks for your prompt attention and kind treatment received in all my transactions with you.

Very truly yours,

JOHN J. SEALY, Medina County, Ohio.

I have never seen or grown anything in the oats line so pleasing and satisfactory as your Big Banner White Oats. They are early, stand up well on the strongest, richest ground and outyield ordinary varieties more than two to one, and superior in quality as well as in every other respect. Made me yield of 111 bushels per acre the past season.

JOHN C. CLINGMAN,
Fremont County, Colo.

I want to tell you about my crop from the Big Banner Oats I got from you last spring. They were simply immense—never saw anything like them. Got 1,900 bu. from 20 acres. Sowed $2\frac{1}{2}$ bu. per acre and got 1,000 bu. more than any of my neighbors got from the same amount of land.

JAMES P. HOLLAND,
Saline County, Mo.

I sent to you for some of your New Alberta Oats two years ago and sowed them on ordinary ground. I still have on exhibition here some of the largest heads that I cut from my crop, some of them measuring $23\frac{1}{2}$ inches in length and a large majority of them running 16 inches. I much regret that I did not send a bushel of them to you.

Very truly yours,

A. A. MILLER, Clay County, Mo.

I threshed 105 bushels of your Big Banner Oats from one acre with $2\frac{1}{2}$ bushels of seed I got from you last spring. Every bushel weighed out 45 to 48 lbs. per bushel and the finest oats in appearance I ever looked at.

JOHN T. SIBLEY, El Paso County, Colo.

Ratekin's New Kherson Oats

York, Neb., Sept. 15.

Ratekin's Seed House, Shenandoah, Iowa.

Gentlemen: The new Kherson Oats I got from you last spring are just what you claimed for them. "They are without a blemish. Without a flaw. The most wonderful oats this country has ever had." I threshed 1,270 bushels from ten acres. How is that? Tell the farmers everywhere to sow the Kherson Oats. There is none like them. The early dry weather done up other sorts here, and I will sell every bushel I have for seed.

Truly yours,

JOHN SHUBERT.

The most wonderful oats this country has ever had. John R. Lang of Sherman County, Neb., raised 112 bu. per acre. John Sipple, of Guthrie County, Iowa, says the Kherson produced double the yield of common oats on his place.

The Great New Kherson Oats

We will put this variety up against any other kind of early variety for general crop and all purpose oat. Brother Farmer, what reason have you for growing 25 to 35 or even 40 bushels of oats when you can just as well grow 60 to 100 bushels with our improved varieties. We admit that twenty years ago we seldom had over 35 or 40 bushels of oats per acre. At that time we were growing only 25 to 35 bushels of corn per acre, but this is a NEW ERA. Land has become more valuable, and farmers have learned that there is as much difference in varieties of grain as there is in breeds of horses, cattle and swine. Who would think of raising a 2,000 lb. horse from a mustang pony; a shorthorn from a Texas cow, or a 1,000 pound hog from an Arkansas razor back? My! Neighbor, how things have changed since we were boys! There is not a single yield given in our catalogue that some wideawake farmer did not have, and that you yourself could not have right on your own farm, IF YOU BUT WILL. There is not a question about this. You are or can be just as good a farmer as anyone else, if you wish to be, and if you wish good yields you can have them every time, but you must work and think. Plant your ground and prepare it in good order; then get RATEKIN'S RELIABLE AND IMPROVED THOROUGH-BRED SEED. They will astonish you with the big yields you

will get. Commence this year. LET THIS BE A NEW ERA. It will pay you. There is a handsome profit in it to you. Big yield means big profits. It's the last 10, 20 or 30 bushels per acre of wheat, corn or oats that gives the profit in your crop. Now, why not have that profit this season?

The great New Kherson Oats stand up better, and yield better and heavier than any other early oat there is grown. They are two weeks earlier than other earliest varieties. We have tried a score or more of early varieties, but have never found anything to equal this New Kherson variety. We are placing the price on these oats very low, as we are on all our improved varieties. This with the superior quality of our oats this year will justify you in buying all your seed from us. Remember, also, that every bushel of seed oats sent out by us is thoroughly re-cleaned and graded; absolutely FREE FROM ANY TRASH OR NOXIOUS WEED SEED, and when you get them they are ready to sow.

Sauk County, Wis., Oct. 1.

Ratekin's Seed House.

Gentlemen: I sent to you for ten bushels of oats last spring. I have just threshed from them 576 bushels of the finest oats I ever saw. I never saw anything to equal them. They are all you claim for them.

Truly yours

OLE OLSON.

The seed oats received from you last spring was sown on eight acres of land and gave me a yield of 420 bushels, or $52\frac{1}{2}$ bushels per acre, and since the average yield of the oat crop in Illinois was less than 25 bushels per acre last year, and that of a very poor, light and chaffy quality, I naturally feel quite pleased with the investment made for the seed.

Very truly yours,

ARTHUR JONES, Macomb, Ill.

The Big Banner Oats I purchased from you last spring proved everything you claimed for them; 25 bushels of seed sown on 10 acres of ground made me 960 bushels, machine measure, and every measured bushel will weigh out 40 to 45 lbs.

LEVI SMITH,

Adams County, Neb.

The Big Banner Oats did fine. Threshed 100 bushels from two bushels of seed bought from you last spring.

J. M. BURBANKS, Clayton County, Iowa.

I believe among all that is good, RATEKIN'S BIG BANNER 100-Bushel White Oats to be the best. Side by side with other varieties the past season they made two bushels to one of other sorts.

JAMES SWEENEY, LaPorte County, Ind.

RATEKIN'S BIG BANNER 100-Bushel White Oats stand pre-eminently at the head of any other oats I have ever grown. From 10 acres the past season I grew 960 bushels of the finest oats I ever saw, weighing out 47 pounds to the measured bushel.

L. W. ARMSTRONG, Cerro Gorda Co., Iowa.

Your Big Banner Oats done splendidly for me the past season. Made an average of 78 bushels per acre, or 1,560 bushels on a 20 acre field, measured land.

SAMUEL KOTCH, LaSalle County, Ill.

I am more than pleased with the success and results from your Big Banner Oats. I obtained 94 bushels per acre the past season—940 bushels off 10 acres of ground, weighed measure. These oats, however, weigh out almost as heavy as lead. I am well pleased.

JACOB KERNS, McLain County, Ill.

I want to tell you about my crop from the Big Banner Oats I got from you last spring. They were simply immense—never saw anything like them. Got 1,900 bu. from 20 acres. Sowed $2\frac{1}{2}$ bu. per acre and got 1,000 bu. more than any of my neighbors got from the same amount of land.

JAMES P. HOLLAND,

Saline County, Mo.

My oats stood 5 feet high; made 80 bushels per acre; were the admiration of the surrounding country. The heads measured an average of 10 to 12 inches.

E. J. BROWNING, Franklin County, Vt.

CONCLUSION ON OATS

Since the average yield of oats in the United States is but 27 bushels per acre, as shown by the U. S. Government reports, it necessarily follows that there are many hundreds and thousands of acres that do not produce anywhere near the average, 27 bushels per acre, as there are many other thousands of acres that produce very much above the average. But there is seldom any reasonable cause for these meager yields. Germany, France, Russia and other of the old countries grow and produce an average yield of two and three times as much per acre of wheat, oats and rye as are produced in this country, on land that never was naturally as productive as the lands of this country. Still their lands have been in cultivation 400, 600 and some 1,000 years. Why the cause of this? It is the man behind the guns! There they plant only the highest grade of the most improved varieties of seed on the most thoroughly prepared land, but no better lands than this country affords. AGAIN, "LET THIS YEAR BE THE BEGINNING OF A NEW ERA." All our varieties of oats are everything we claim for them and you will make no mistake in sowing your entire crop to some of them, especially our New Alberta, Canada, grown, Ratekin's Big Banner 100-Bushel Oats, New Kherson, and Northern Grown Texas Red Rustproof, also Speltz.

Successful Forage, Silage, Grain and Fodder Crops and Plants

SPRING CROPS, CATCH CROPS, DRY WEATHER CROPS and SURE CROPS

"Feterita Early" Drought Proof, Sure Crop and Big Yielder

We want to say a few words here, next, about Spring Crops, Summer Crops, Catch Crops, Dry Weather Crops and Sure Crops; crops that can be depended upon for grain, feed and forage under almost any conditions, a number of them that can be planted very late, in June, July, August, and some as late as September, especially in the South. A number of them can be planted or sown after small grain is cut and taken off the ground, also after such crops as early Corn, Potatoes and such like. Rye can be sown in front of the plows at last plowing and will make an abundance of the most valuable fall pasture. But we wish more especially to draw attention to the different Sure Crop, Feed and Forage Crops listed and described on this and the preceding page. Also other valuable and profitable crops listed and described on the following pages, for late planting.

It is a well known fact by all farmers, from past experience, that it is seldom that two wet years come together. The past year, during crop season, proved a record breaker for rainfall, everywhere throughout the whole United States. There was the greatest excess of rainfall ever before known in the history of the Weather Bureau; abundant crops were grown, except on the lowlands, where it was flooded from rain and overflows. While we do not claim in the least to be a weather prophet, or to foretell conditions the coming year, we do know that "HISTORY often REPEATS ITSELF," and we will be SURPRISED and happily disappointed IF THERE IS NOT a good many DRY SPOTS over the country in the year 1916. For this reason, or belief, we would advise farmers to sow and plant liberally of early varieties of Corn, Oats and Forage plants, also to provide themselves with seeds for late and Catch Crops. Hot winds and dry weather are usually the most prevalent during the last of June, in the South, July and August in the North, at times when the Corn is in its tenderest stage. In view of these conditions it is well, and necessary, to look out for varieties of Corn that has the greatest drought resisting qualities. These qualities will be certainly found in Ratekin's "Diamond Joe's Big Early White;" our pure bred, genuine "Iowa Silver Mine White;" "Iowa Mammoth Yellow Dent" and "Ratekin's Pride of Nishna, yellow." These are four varieties of Corn you can feel safe and sure to bank on, and rely upon, as the greatest drought resisting varieties that are grown. All of them are early to mature and are of the heaviest yielding varieties, wet or dry, there is grown. "Don't put all your eggs in one nest or basket, for some may get broken, or some may not hatch; however, these varieties can always be depended upon in years of plenty or years of famine. These SURE CROPS have saved many a farmer from ruin in excessive wet and dry seasons. No one should take up any of the ideas to "get rich quick." The Germans, in all lines, be he farmer, mechanic or professional man, have proven the most successful American farmers we have with us, and by the way, the Germans are among, if not our best, customers. He invariably tries and strives for the best, latest, most improved varieties. While he is cautious and possibly a little skeptical, he is like the Missourian, "ready to be shown."



Feterita.

Feterita This is a new combination grain and forage plant introduced into the United States only a few years ago from the Sudan region in Central Africa. Feterita has now been thoroughly tried out in every part of the United States and proven to be the best and most valuable combination grain and forage plant ever introduced into this country, especially in localities subject to drought, but does well everywhere, in every region and every climate. It grows 6 to 9 feet high. It is planted and cultivated similar to Corn or Maize. However, we consider this a much more valuable crop than Maize. It is from 15 to 20 days earlier than Maize, makes 15 to 30 bushels more per acre, and the forage is far superior to either Maize or Corn. The stalk is slender and the sap is sweet like sorghum (sugar cane), and makes excellent forage. Feterita has proven to be the greatest drought resister, except possibly Sudan Grass, of all the sorghum family, making good grain and forage even when Maize and Kafir and other crops failed. The grain is about three times as large as Kafir and is pure white. It grows even in height and is the prettiest crop we have ever seen growing. It needs no fertilization, but will make paying crops on land too poor to make corn or other crops at all, yet it is not indifferent to good soil. We have a choice lot of seed Feterita this year, grown from our own crops here, especially selected and re-cleaned, and want every farmer who has stock or poultry to try a few acres of it. It will not disappoint your best, sure expectations. It's one of the best poultry foods there is grown.

PRICE: Pkt., 5c; 1 lb., 20c; 5 lbs. (enough to plant one acre), 90c, not prepaid; 25 lbs., 10c per lb.; 50 lbs., 7c per lb., bags included.



PENCILARIA

Pencilaria A WONDERFUL FODDER PLANT. A new fodder plant of untold value. To the farmer for its immense growth of hay; for its excellent fodder; for its quick growing foliage. It is a native of Central America. It is an annual plant, having broad foliage, very much resembling corn leaves. If cut as soon as it reaches the height of 2 or 3 feet it can be mowed from 4 to 6 times, according to the latitude. If allowed to grow 12 or 18 feet high and cut when the flower heads begin to develop it will yield the heaviest fodder crop per acre of any plant now in cultivation. For feeding it is equal to any fodder, and is relished by any kind of stock, either dry or green.

ENORMOUS GROWER.

It should be planted 6 inches apart in the row and the rows about 3½ feet apart. Cultivate two or three times if possible, and by that time the sight will astonish the beholder, and you will marvel at its luxuriance, and your wonder will but then begin. It will average 40 rich, juicy, leafy stalks to the plant. Sow as early as you would Indian Corn. The usual way of growing it, however, is to mow same when 3 to 6 feet high, and it will immediately start again and can be mowed 4 to 6 times during the season. Every farmer, everyone who keeps cows, horses and hogs, should try it. Sow in drills 5 to 6 lbs., or broadcast 8 lbs. per acre. **PRICE:** Pkg., 5c; 1 lb., 25c, postpaid. By express: 1 lb., 15c; 10 lbs., \$1.30; 50 lbs., \$6.00.

Thousand Headed Kale It is but 12 years ago since we introduced Rape. Up to that time scarcely 50,000 pounds found their way to this continent, but since we began to offer Rape and push the sale and win farmers to our opinion as to its great feeding value, the sale of Rape has become something enormous. We ourselves need over **ONE HUNDRED THOUSAND POUNDS** to fill our orders. We now have another novelty, entirely new to most American farmers, **Thousand Headed Kale**. It is grown extensively in Holland, Denmark, Russia, England, and is now being grown with equal success all over this country.

100,000 POUNDS PER ACRE. W. S. Coe, one of the largest sheep growers in England, has this remarkable testimony for **Thousand Headed Kale**: "I plant annually 100 acres of **Thousand Headed Kale** for my sheep. I have repeatedly estimated a yield of 100,000 lbs. of green food per annum from one acre of **Thousand Headed Kale**. Sheep will eat the plant apparently clean, when a week afterwards it is again in full glory, and sheep can be turned on, and this can be repeated time and time again. I would not get along without Dwarf Essex Rape and **Thousand Headed Kale**; in fact, I would have to go out of business, as I could not raise sheep without these two magnificent plants."

Sow 2 lbs. per acre and treat similar to Rape. You will be astonished at the tremendous results you will get from **Thousand Headed Kale**. **PRICE:** Oz., 5c; ¼ lb., 12c; 1 lb., 35c; 2½ lbs., 85c, postpaid. By freight: 1 lb., 25c; 2½ lbs., 60c; 5 lbs., \$1.00; 50 lbs., \$8.75; 100 lbs., \$17.00.

Successful Forage, Silage, Grain and Fodder Plants

Spring Crops, Catch Crops, Dry Weather Crops and Sure Crops

Ratekin's Teosinte "This plant affords opportunity for one to make millions of blades of grass grow where none of any account grew before." This is what Prof. Asa Gray said of Teosinte. The plant came to us from the fertile plains of the Nile, where travelers tell us the enormous yield of 300 tons of green fodder per acre is not uncommon. Here in America, too, its yields have been marvelous. It has always given the heaviest yields of any of the forage crops grown. It is a remarkably vigorous grower, reaching 12 to 18 feet in height, with an unusually abundant supply of leaves and tender stems. Quite often a single kernel will produce as much as 60 to 100 stalks. If cut when it reaches 4 to 5 feet in height it makes excellent fodder and will produce a second crop fully as large as the first. The stalks contain from 8 to 10 per cent of sugar.

CULTURE OF TEOSINTE: Plant in hills four to five feet apart each way about corn planting time, and cultivate like corn. It will soon look like a dense forest. Makes a magnificent fodder for cattle during the winter months. Give it a trial. It will more than pay you; grow it for your cattle and hogs. You will be surprised what a tremendous amount of fodder you will get off of an acre.

PRICE: Package, 10c; oz., 15c; ¼ lb., 40c; ½ lb., 75c; 1 lb., \$1.25; 2 lbs., enough for one acre, \$2.25; 10 lbs., \$10.00, postpaid.

"The Teosinte is excellent. It grew from ten to twelve feet high and from forty to fifty stalks for one kernel of seed."

BARBARA FRYE.

Joe A. Noble, Caddo, Ky., says: "Am well pleased with Teosinte as a fodder plant. I grew from one kernel of seed 113 stalks fourteen feet high. That is immense."

Montgomery County, Mo.

Teosinte is a great fodder plant, and am wonderfully pleased with it. Forty tons of magnificent fodder to the acre is my yield.

J. ROPPEL

Coesfield, Texas.

Teosinte is simply immense. It did not seem to care whether the drouth struck it or not and kept right on growing. It did not have any rain for ten weeks, but the 26th day of August we had a good rain. Now, you think it is not growing, but it is. One stalk of it grew eleven inches in thirty-six hours. On one plant raised from one kernel of seed I got sixty-four strong, bushy stalks.

JOHN URHIN.

NOTE: The sorghums all have better drouth resisting qualities than Indian corn. The varieties are many, and may be classed as saccharine and non-saccharine (sweet and non-sweet). The first group includes sugar cane, etc.; the second group, Milo Maize, Jerusalem Corn, Kafir Corn, etc. Within recent years dairymen have widely recognized the high economical value of thickly sown sorghum as a summer food for milch cows.

Early Amber Cane. Its great adaptability as a food for live stock has attracted general attention. Its great merit is now appreciated. It is sweet, tender, nutritious and greedily eaten by cattle, horses and hogs. Dairymen find that cows give more and richer milk from its use and it produces as high as twenty tons of fodder per acre. It can be grown successfully in any part of the country from Canada to Texas, and from the Atlantic to the Pacific. It is one of the best plants to withstand drouth, and is therefore a sure crop. It is usually put in during the first half of June, sowing 100 pounds per acre, broadcast, or 60 to 75 pounds per acre if sown with a wheat drill. Cut just before frost with a mower and cure like hay, or with a binder and stand the bundles up.

PRICE: Pkt., 10c; lb., 25c; 3 lbs., 65c, postpaid. By express or freight, not prepaid, pk., 60c; bu., \$2.00.

Yellow Milo Maize A non-saccharine sorghum of high value; cultivated like corn. It is a vigorous grower, of deep green color, attaining a height of 8 or 10 feet. Some stalks develop 20 heads. The seed is fed to horses, cattle, chickens, etc. It will mature its main head in 100 days and will continue growing until frost. Plant four to five pounds per acre.

PRICE: Pkt., 10c; lb., 25c; 3 lbs., 65c, postpaid. By express or freight, not prepaid, pk., 85c; bu., \$3.00.

Jerusalem Corn This non-saccharine sorghum is one of the best and surest grain crops for dry countries and seasons. It grows about 3 feet high and makes one large main head and several smaller ones. The grain is pure white and a good food for man or beast. Use 3 pounds of seed per acre.

PRICE: Pkt., 10c; lb., 25c; 3 lbs., 65c, postpaid. By express or freight, not prepaid, pk., \$1.00; bu., \$3.50.

Kafir Corn This is a most excellent fodder plant. It grows from 6 to 8 ft. high, making a straight, upright growth. The stem or stalk bears numerous wide leaves. The stalks keep green and are brittle and juicy, making excellent fodder, either green or dried. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. There is no failure about this, as it possesses the quality that all the tribe possess of going without rain without any loss of capacity or yield. The grain is extremely valuable for poultry. Cultivated the same as corn, requiring 5 pounds of seed per acre. For fodder sow one-half to one bushel, either broadcast or in drills.

PRICE: Pkt., 5c; lb., 20c; 3 lbs., 50c. By freight, pk., 60c; bu., \$2.00; 2 bu. or more at \$1.75.

Prices on all items on this page are subject to market fluctuations. If market declines or advances you will always get the benefits and full value of money sent. If you want to order in large quantities write for latest firm prices, stating variety and quantity wanted. Our prices will always be as low as the lowest, quality considered.



Teosinte.



Early Amber Cane.



Kafir Corn.



Milo Maize.



Jerusalem Corn.

Ratekin's Successful Annual Forage and Pasture Plants

The Great Oriental Grass Yields 10 to 15 Tons of Fodder to the Acre



Oriental Grass.

Oriental Grass

MORE NUTRITIOUS THAN OATS, CORN OR ENSILAGE. A new grass, imported from the sunny isles of Japan. Our attention was first called to this grass by Japanese authorities who recommended it very highly for feeding dairy cattle, young stock and sheep, it being very rich in protein and nutritious element.

At our farms it has proven a wonderful success as a forage plant and far beyond our best expectations, producing, at the rate of 50 bushels of seed, 30,000 lbs. of green fodder, 10,000 lbs. straw, 11,000 lbs. hay to the acre, and has proven to be equal to alfalfa hay and superior to corn fodder or ensilage or oats for feeding milch cows; also other stock. If sown in the South, Oklahoma, Texas, Louisiana, Mississippi and that latitude the last of April it will be ready to cut for hay the middle of July. In the North, in Iowa, Nebraska, Illinois and other northern states, it should not be sown until about May 15, dependent on the seasons and latitude where sown. It attains a height of 5 to 8 feet, according to the season, and when desired for hay should be cut just when the heads begin to appear and before the seeds begin to form. We can fully recommend this new annual grass, and want to urge and insist on all our customers and friends to at least make a trial of it. Sown broadcast requires 18 to 20 lbs.; drilled, 12 to 16 lbs. to the acre.

PRICE: By mail, postpaid, per lb., 25c; 3 lbs., 60c. By express or freight, expense of purchaser, 10 lbs., \$1.50; 25 lbs., \$3.50; 100 lbs., \$12.00.

Broom Corn is one of the most profitable crops the farmer can grow if given proper attention. If you want full information about how to grow Broom Corn, write to the Department of Agriculture, Washington, D. C., for Farmers' Bulletin on Broom Corn. Postpaid, ½ lb., 15c; lb., 25c; 3 lbs., 65c.

Shallu A NON-SACCHARINE SORGHUM FROM INDIA. Producing very large yields of both grain and fodder on account of its stooling habit, 3 to 6 stalks are produced from a single grain. The stalks do not harden, as do other fodder crops, but keep green, brittle and juicy. A most excellent fodder, either green or dry, being highly relished by all stock. It forms a large head, similar to broom corn, with round, plump white seeds, and has proven an excellent feed for horses, cattle and chickens. It makes an excellent flour for pancakes. Does well everywhere. Should be sown in rows 3 feet apart, 3 to 5 lbs. to the acre. For fodder sow 25 to 50 lbs., either broadcast or in drills. **PRICE:** Pkt., 10c; lb., 25c; 3 lbs., 65c, postpaid; by express or freight, not prepaid: Peck, \$1.25; bu. (56 lbs.), \$4.00.

SOW AND PLANT FORAGE AND DRY WEATHER CROPS THIS YEAR AND BE PREPARED FOR DRY WEATHER AND HOT WINDS.

Ratekin's Quick Annual Hog Pasture Mixture

QUICK HOG PASTURE MIXTURE; BEST IN THE WORLD; \$4.00 per cwt.

This mixture is one of the best and most profitable ever devised by man. It comes early and quickly and furnishes a green, nutritious feed early in the season when hogs and other stock crave and most need green feed. If you have **HOGS** don't fail to sow one, two, three or ten acres of it, dependent on the number of hogs or pigs you have. It requires but 100 lbs. of seed per acre, but is worth \$100.00 per acre to every farmer that has twenty or more hogs. **IF YOU HAVE BUT TEN HOGS**, then sow a half acre to this **QUICK ANNUAL HOG MIXTURE**. It will pay you 100 per cent above the cost of the seed. **DON'T FAIL TO SOW TWO, THREE OR TEN ACRES OF OUR QUICK ANNUAL HOG PASTURE MIXTURE. IT WILL SAVE AND MAKE YOU MONEY. IT WILL PAY YOU BIG TO SOW LIBERALLY OF IT.** Price for quick hog pasture, \$4.00 per 100 lbs. In 500 lb. lots, \$3.75 per 100 lbs. Sacks free.

SOW FIVE TO TEN ACRES OF BILLION DOLLAR GRASS FOR HAY AND FORAGE FOR YOUR HORSES, CATTLE AND SHEEP.

Dwarf Essex Rape **RING THE BELLS;** stand aside and make room on every farm for a patch of a few acres of Dwarf Essex Rape, the most profitable pasture crop or plant in existence. Yes, come here, Mr. Farmer, until we tell you about it.

ONE ACRE of Dwarf Essex Rape will furnish and pasture more hogs, cattle and sheep than six acres of grass or clover. As a healthy, fattening pasture food it has no equal. It stands without a rival in cheapness and effectiveness.

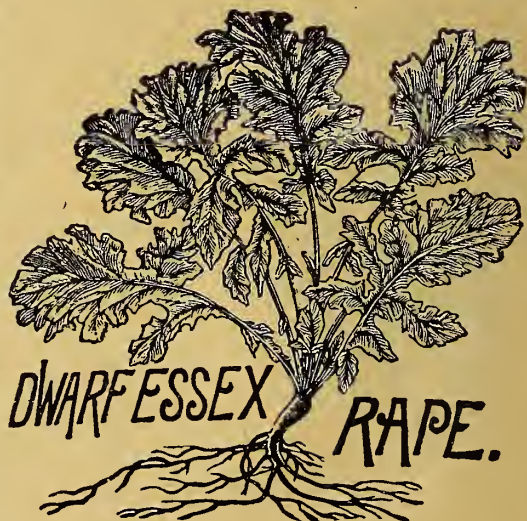
It is an annual, bearing a close resemblance in leaf and stalk to the Rutabaga, but both leaves and stalk are more numerous in the Rape plant, and of a taller habit of growth. It is a pasture plant which may be eaten off by any kind of live stock, but it is pre-eminently fitted to furnish pasture for sheep, cattle and swine.

A good crop will furnish at least 12 tons of green food, and its nutritive value is twice that of clover an acre. One acre of well grown Rape will furnish pasture for ten to twenty head of sheep for two months, and in that time it will fatten them in good form for market.

Uses: Dwarf Essex Rape thrives best on a good soil, rich in vegetable matter. Slough lands are excellent. This plant may be grown successfully in the following ways, viz: 1. In the early spring to provide pasture. 2. In June or July, on well prepared land to provide pasture. 3. Along with grain, using 5 lbs. of seed an acre, to provide pasture for sheep after harvest. 4. Along with peas, oats, clover seed, to provide pasture and to get a "catch" of clover. 5. As a cover in the orchard for winter protection to avoid root-killing. 6. In corn, sowing the seed with the last cultivation; the succulent feed produced may save the loss of cattle by cornstalk disease. Prevention is better than medicine in treating this fatal disease. 7. Along with Rye, sown in August, in sheep pasture. 8. On early plowed fields to shade the land and so that the soil will not leach, wash or drift. 9. To plow under as a green crop, adding humus to the soil, an element needed in grain growing sections. When rape is sown broadcast, 5 lbs. of seed an acre will suffice. When sown in rows, say 30 inches apart, and cultivated, 2 lbs. an acre will be enough. Hundreds of farmers have written us, asking methods of rape culture. Why, it's the simplest crop grown in the world. You can sow it anywhere and everywhere, and at all times after danger of frost is past until September 1, later in the South. We have hundreds of customers who sow 50 to 500 lbs. each year. Rape is adapted as a catch crop and may be sown in the early spring to provide summer pasture for stock. Plow the ground same as for turnips and sow 5 lbs. per acre broadcast, or can be sown in corn and plowed in last plowing. Then after you have cut small grain sow in stubble, running disc over the ground to give light covering. There is nothing so easily and profitably grown, and practically at no cost. Sow Rape; it will please and profit you. Our seed is pure Dwarf Essex, imported direct from Essex, England, new crop grown.

PRICE: 1 lb., by mail, postpaid, 25c; 5 lbs. (will sow an acre), \$1.10. By freight or express at purchaser's expense: 10 lbs., \$1.40; 25 lbs., \$3.25; 50 lbs., \$6.00; 100 lbs., \$11.50.

Rape is adapted as a catch crop; like the turnip, it grows better late than earlier in the season. When a crop has failed from any cause, sow Rape upon it.



Ratekin's Successful Annual Forage and Feed Crops

Money Saving Crops The crops on the farm may be divided into two classes, the money making and the money saving crops. The real need of the farmer is not only the money making crops, but the money saving crops. The vital proposition is the production of those crops that will make and save the most money and give the best and most profitable returns, whether it saves or makes you money. A dollar saved by planting money saving crops is like the old saying, "One bird in the hand is worth two in the bush."

SUDAN GRASS

HAS EVERY OTHER FORAGE PLANT BACKED OFF THE TRACK.

Sudan Grass is the wonder of the age. It is the greatest forage plant ever introduced by the United States Department of Agriculture. It seems to have taken the country by storm.

Extract from United States Department of Agriculture, Bureau of Plant Industry's Bulletin:

The Origin of the Seed In the year of 1909 a small amount of this seed was brought into this country from Sudan, Egypt, by the United States Department of Agriculture. It has been thoroughly tested since its introduction, in many sections of the United States, everywhere a success.

"Sudan is probably the wild original form of the cultivated sorghums. It is a tall, annual grass, growing under favorable conditions to a height of 6 to 10 feet, but when broadcasted thickly, it grows only 4 to 6 feet high. The stems are fine, the largest stalks seldom larger than a lead pencil. Where the plants are scattered, they stool abundantly, as many as 100 to 150 stalks coming from a single root. In general appearance, Sudan Grass is very much like Johnson Grass, but they are entirely distinct, for Sudan Grass lacks root stocks and, therefore, never becomes troublesome as a weed. The stems are leafy, erect, and seldom lodging. The grass cures easily, making hay of excellent quality, which is readily eaten by all kinds of live stock. It has been grown with marked success throughout the semi-arid regions, maturing seed even in South Dakota. It grows well through the humid regions, and from Central Missouri southward, will ordinarily yield two and three cuttings of hay in a season. It is considerably earlier than the earliest Amber Sorghum and will mature as far north as the Canadian line."

"Growing the Crop It may be grown either drilled, in cultivated rows, or broadcasted. If planted in cultivated rows, the rows should be as close as possible, and yet permit of easy cultivation. In 24 to 30 inch rows, 2 to 3 lbs. of seed per acre is ample; and, under conditions of very low rainfall, this method is recommended. Under humid conditions, 18 inch rows are preferable, and 5 lbs. of seed per acre are sufficient. For drilling or broadcasting, 15 lbs. of seed per acre should be used. The seed should not be sown until the ground is warm, that is, about the time for planting corn. The young plants will withstand slight frosts without injury."

"Harvesting the Crop The hay should be cut as soon as the grass is fully headed, and early cutting is especially advisable where two or more cuttings per season are expected. The grass can be cut with a mower, but more conveniently with a binder, especially in dry regions, as the hay cures very readily in bundles."

"Saving the Seed The grass yields a heavy crop of seed, especially in cultivated rows. If the seed is grown for commercial purposes, it is highly important that it be grown on land not infested with Johnson Grass, as the seeds of the two are distinguishable only with difficulty. It is recommended that, in growing for seed only, it be cultivated in rows, taking great care to hoe out and eliminate any Johnson Grass or other weeds, etc., that may show in the Sudan Grass. It crosses very readily with all the cultivated varieties of Sorghum, and when it is grown near any such variety, more or less numerous hybrid plants will appear in the progeny. These hybrids do not harm fields intended for hay, but where a crop is to be harvested for seed, the hybrid plants should be rogued out. This should be done preferably as soon as the hybrids appear in bloom, so as to prevent further crossing in the field, but in any event, it should be done before the Sudan Grass is harvested. The Sudan Seed weighs about 32 lbs. to the bushel."

Sudan Grass WITHOUT DOUBT HAS SOLVED THE HAY QUESTION THE GREATEST DROUGHT RESISTANT FORAGE CROP KNOWN. At the same time it does not blight where the moisture is heavy, and under good seasonable conditions it yields a larger tonnage of hay per acre than any other crop known. It recovers rapidly after cutting and the next crop is usually ready for harvest within thirty days from the first cutting. Sudan Grass has without doubt solved the hay question wherever grown. Farmers are looking for a crop with both a feeding value and a market value. This country has never produced enough hay. Good hay always brings splendid returns. Hay is the best forage and the most convenient to handle. Sudan Grass is a great hay producing crop, both in quality and yield, makes a nutritious and palatable

hay which is greatly relished by cattle, horses and other farm stock. In feeding value the hay is second only to Alfalfa and far better than Millet, which is usually grown as a catch crop. Its yield is also much larger than Millets. Sudan Grass has everything in the way of forage crop we have ever seen in this section backed clear off the boards. We are now cutting three tons and over of excellent hay to the acre from seed planted the first of June, which had not more than 2 inches of rain all told. It is 6 feet high and is as fine as one could wish for.

Normal, Ill., Aug. 31, 1915. A. M. AUGUSTINE, Secy. Ill. State Horticultural Society. The United States Department of Agriculture states that in 1913, when conditions were unusually severe, the following hay yields per acre were recorded:

Eastern South Dakota and Southern Minnesota, 4 1/4 to 5 tons. Maryland and Virginia, 2 to 3 1/2 tons. Eastern Colorado and Northern Texas, 1 1/2 to 2 1/4 tons. Tennessee and Mississippi, 2 to 5 1/2 tons, etc.

These yields were made without irrigation. When irrigated the crops were from 8 to 9 tons and over, per acre. The yield of seed is on dry land from 500 to 1,000 lbs., but on irrigated land as much as 2,550 lbs. have been grown per acre. Sudan Grass crosses quite easily with other cultivated sorghums and Johnson Grass, but our seed has been grown in the North, where no Johnson Grass is grown, and our fields have been kept far apart from any other Sorghums. We can assure our customers, therefore, of the high quality of our Sudan Seed.

PRICE of Sudan Grass Seed: Pkg., 10c; 1/4 lb., 20c; 1 lb., 35c, postpaid. By freight or express, 1 lb., 30c; 10 lbs., \$2.70; 100 lbs. and over, 25c per pound.





Billion Dollar Grass.

The Most Valuable of All Annual Grasses Grown.

Ratekin's Billion Dollar Grass

Especially Valuable for Silo and for Feeding Green—Better than the Best Corn Fodder

From Japan, that mysterious country, which is furnishing (and has furnished in the past) many rare farm seeds, comes this remarkable grass—remarkable in a hundred different ways, for there is nothing known to man today that is more luxuriant, more prolific, more marvelously rich and vigorous in growth than Billion Dollar Grass.

A Quick Producer It will produce a hay crop in from six to ten weeks, anywhere, and if sown the first of May will be ready to cut the middle of July for hay, attaining the height of (according to the richness of the soil and warmth) from 5 to 7½ feet. It is pre-eminently the grass to sow if you are going to be short on hay for your horses, mules, cattle and other stock.

Better than Corn for Silo Cows with both Billion Dollar Grass and corn before them will take Billion Dollar Grass first and consume it without waste; when put upon Billion Dollar Grass they increase in milk and fall off when feed is changed to corn. An ideal ensilage mixture is made of two parts Billion Dollar Grass and one part of Soja Beans, or Cow Peas, mixed when filling the silo. This mixture forms a complete balance ration for milch cows without grain, oil cake, etc.

Culture of Billion Dollar Grass

Everybody reading the above regarding this wonderful grass will wish to know its best method of cultivation. If you wish very fine, leafy hay, and have strong, rich ground, sow at the rate of twenty pounds per acre, but if your soil is but moderately rich, then sow at the rate of twelve pounds per acre. This latter is the amount we ourselves sow, and find same very satisfactory. It can be sown at different times of the year; especially if you wish same for pasturage, or if you are short of hay. It can be sown in April, in May, in June, in July, and even in August, and will return glorious, heavy crops.

FOR FEEDING GREEN: All rich, luxuriant growing grasses and forage plants must be fed in the green state moderately at first. Billion Dollar Grass is one of those rich, magnificently luxuriant growing grasses; therefore you should turn in hogs and cattle and sheep and horses at first moderately, after they have had a good feed somewhere else, and then gradually accustom them to this. It is on the same plan as hungry stock turned into rich clover; they would find harm—yes, possibly death. Turn them in at first moderately, and you can soon keep them in permanently.

FOR SEED: Let Billion Dollar Grass get thoroughly ripe; cut and thresh as you would timothy. The seed is rich and nutritious.

A Remarkable Grower It is truly the most marvelous grower, the most luxuriant stooler that we have ever seen. Imagine a field sown to Billion Dollar Grass, with every spear of it over 6 feet tall, yielding from 26,000 to 50,000 pounds of as rich, green fodder as the world has ever seen. Men talk about hard times, but positively hard times must vanish on every farm where Billion Dollar Grass is sown. You can get two or three rich crops from the same annually; and then a big lot of fodder besides. If you sow early you will get from 26,000 to 50,000 pounds of fodder, which you can put in your silo or cure for hay, and Billion Dollar Grass will quickly spring up again and give you another yield that will astonish the country. This can be cut again for hay; then the field will give you a pasturage all fall, and horses and hogs and sheep and cattle and poultry will eat it greedily.

Feeding Value Here is where Billion Dollar Grass comes into play. Prof. Williams of the United States Department of Agriculture says: "Already widely grown as a hay crop, it deserves more general use for soiling, as this grass is of particular value for feeding to dairy cattle, young stock and sheep." Poultry, geese and turkeys all relish Billion Dollar Grass in the green state, and keep healthy and fresh on the seed thereof when fed during the fall and winter months.

Hogs and their families. The hogs grunt and give that contented swag of the tail when they can pasture on Billion Dollar Grass, and then if you wish to fatten them, give them rations of the seed. Remember, this grass will produce from forty to sixty bushels of seed per acre. This fed, either ground or coarse, makes excellent food, although it is inclined to be slightly laxative.

Cows, calves and other stock look with pleasure on the Billion Dollar Grass pasture and feed in contentment upon its luxuriant swath and glory in Billion Dollar Grass hay, especially if fed along with Cow Pea Hay or Peaot Hay or grain. Try it this season to make hay out of it, fill your silos therewith and watch the cattle eat it.

Horses, mules and the like jump over a four-foot fence to get at the Billion Dollar Grass, and they will fatten and keep healthy thereon. They will eat the hay as eagerly as cattle.

PRICE BILLION DOLLAR GRASS: Pkg., 10c; lb., 25c, postpaid. By freight, 12 lbs., \$1.20; 20 lbs., \$1.80; 50 lbs., \$4.00; 100 lbs., \$7.50. Bags included.

James A. Leppo, Carroll County, Md.: "I am greatly pleased with the Billion Dollar Grass. I believe it will be a good thing in this country. It was from five to six feet high when I cut it the first time."

George A. Wright, Orleans County, Vt.: "Billion Dollar Grass is a great grass for yield, easily making six tons of hay per acre. It is a quick growing grass. Stock like it very much. I wish every farmer would try it."

J. E. Park, Marshall County, Tenn.: "I planted Billion Dollar Grass June 15th: July 20th, in thirty-five days, it was ready to cut—five feet high. It is a splendid grass. I want enough for five acres."

David Daniel Tucker: "Consider it the greatest grass of the century. For an annual—one to sow in May and reap in July and cut again in August, and now another time in September and then feed all fall long, sir—for such a grass there is nothing like Billion Dollar Grass. It is great in stooling properties, quick growth, abundant in leaves, and rich in quality. It is truly the greatest, quickest-growing grass of the century."

"I sowed 100 pounds of Billion Dollar Grass, May 15th, on 8 acres. On July 16th I cut from these 8 acres 25 tons of as fine cattle hay as grows. On Sept. 14th I cut for seed and threshed 11,807 pounds of elegant seed which I sold for \$280.60. Nothing beats Billion Dollar Grass." Amos Miller, Holt Co., Neb.

Houchin Bros., Spink Co., S. Dak.: "Billion Dollar Grass takes the cake. It will yield easily under irrigation, 8 tons of hay and \$20.00 worth of pasture besides."

IF YOU SOW PLENTY OF BILLION DOLLAR GRASS YOUR WIFE CAN DRESS IN SILK AND SATIN AND YOU CAN TAKE YOUR FAMILY AND FRIENDS OUT RIDING IN AN AUTOMOBILE! YOU CAN ROLL IN WEALTH AND LUXURY, BILLION DOLLAR GRASS IS A GOLD MINE TO THOSE WHO SOW IT ABUNDANTLY.

IN OUR BOYHOOD WE LEARNED TO PLOW AND TO HOE; TO REAP AND TO SOW.

In addition to our more than thirty years' experience in the seed business, we have had many years' practical experience on the farm. Yes, we have been up against the "real thing itself," and from the time we first engaged in the seed business 32 years ago, we have always felt the nearer we could keep in touch with the practical farmer, the more valuable information we could gain. Through this source we have been inspired to make many experiments in the improvement of farm crops. Each year since our business began, we have sent out thousands of letters of inquiry, with regard to results obtained from our seed, manner of planting, cultivation, as well as the yield compared with other sorts. By reason of this extended information we believe we are in position to help our customers in selection of seeds best suited to their climate and soil, which we are always and ever ready to do. In fact, we want to help and assist our customers in every way we can, and if they obtain good results, or better returns from our seeds than others who buy elsewhere we feel it the most profitable advertising we can make. It not only insures a continuance of your patronage, but is an inspiration to encourage others to send us their orders.

Millets

All prices subject to market fluctuations in value.

German Millet (True Southern Grown Seed.) In the North, Millet is sown almost altogether for hay, and for that purpose Southern grown seed is best. It grows taller than that from Northern seed, and that means more hay. It is finer than that from Northern seed, and that means better hay. In fact, it is our judgment, based on an experience of many years, that a farmer had better, from the standpoint of profit alone, pay \$2.50 a bushel for true Southern grown German Millet than to sow the best Northern Millet as a gift. Millet seed produced in the North, even from Southern seed, becomes what we call Common Millet. Not only does the plant change in character, becoming coarser and much more dwarf, but the seed itself shows a change, and is readily distinguished by those experienced in handling it.

We wish to say that any Millet seed offered and shipped by us as German Millet is true Southern Grown Seed, and that only.

German Millet is very sweet, palatable, and when fed to dairy cows produces a large amount of milk. On good, rich soil it grows 5 to 6 feet high. It is tender if cut at the right stage, which is when it is in full bloom. About three-fourths of a bushel of seed is sown to the acre. A good yield is from 3 to 5 tons of hay to the acre.

PRICE: $\frac{1}{4}$ bu., 70c; bu., \$2.20; 100 lbs., \$4.35. Bags free.

Common or Northern Grown German Millet This grows very rank and is one of the best varieties for hay or fodder. On good, rich soil it will make a growth of 4 to 5 feet high, and although the hay may seem coarse, yet it is so tender that if cut at the right stage, which is when in full bloom, even the hogs will eat the cured hay quite greedily. A yield of five tons of hay per acre is nothing unusual. Sow three pecks per acre.

PRICE: Large pkt., 5c; lb., 25c, postpaid. By freight, peck, 60c; $\frac{1}{2}$ bu., \$1.10; 1 bu., \$1.75.

Siberian Millet A fine variety from Russia, earlier than either German Millet or Hungarian, and consequently very valuable for the North and yields remarkably. It is extremely hardy, withstanding drought wonderfully, and is about two weeks earlier than the German Millet. The plant stools to as many as thirty to forty stalks from one seed, and is not subject to rust. PRICE: $\frac{1}{4}$ bu., 60c; bu., \$1.95; 100 lbs., \$3.85.

Hog or Broom Corn Millet This is grown for the same purpose for which other Millets are sown, but makes inferior hay, unless cut very young. It, however, yields enormously of seed, even 60 to 70 bushels to the acre, and this seed is very advantageously used for fattening swine and other stock, and is of special value for this purpose in sections where corn cannot be safely or cheaply grown. Seed also makes very fine feed for poultry and young chicks. It is very similar to the Early Fortune Millet, except that the seed is yellowish-white in color. It will mature in about two months from sowing the seed. PRICE: Fancy Recleaned Hog or Broom Corn Millet, bu. (50 lbs.), \$1.50. Sacks free.

Early Fortune Millet A most promising variety, of which astonishing yields are reported. It is very early, and is claimed to be rustproof, and that chinch bugs will not eat the plant. The seed is very beautiful and distinguished in appearance and is of a beautiful red color. The seed is two or three times the size of German Millet. This variety heads in from 25 to 35 days. It gives a large yield, both of seed and fodder. It can be fed to horses and other stock without injury, even when cut so late that the seed has formed. PRICE: Fancy Recleaned Early Fortune Millet, bu. (50 lbs.), \$1.50. Sacks free.

Japanese Millet was first grown in this country by Prof. Brooks, of the Massachusetts Agricultural College, who brought it from Japan. It has proven to be very valuable and is highly recommended for the following reasons: It will grow 6 to 8 feet in height and will yield 15 to 25 tons per acre. It may be siloed, fed green or cured into hay, and its feeding quality is always superior to fodder corn. It can best be sown at any time from the middle of May to the end of July, either broadcast at the rate of 15 lbs. per acre, or in drills, using 10 lbs. of seed so far has been scarce and high priced, but we can offer it at a lower price than usual. PRICE: Large pkt., 5c; 1 lb., 25c; 4 lbs., 80c, postpaid. Not prepaid: 1 lb., 10c; 15 lbs., \$1.25; 50 lbs., \$4.00; 100 lbs., \$7.50.

Kursk Millet This variety was introduced to the farmers of the United States from Russia, in 1898, after which extensive experiments were conducted at numerous experimental stations, demonstrating the superiority of this new variety. It ranks very high both as a hay and seed producer, and in dry years the weight and quantity of hay have been far superior to other sorts. While on moist lands, the German or other southern varieties are recommended, for dry sections we urge the planting of Kursk Millet, knowing that it will produce the results claimed for it. We offer our seed until sold, $\frac{1}{4}$ bu., 70c; bu., \$2.20; 100 lbs., \$4.35.

Hungarian Often called Hungarian Grass. Many regard this as being better even than German Millet, as it is about one week earlier and requires less moisture. The hay is fine and of excellent feeding value. It is especially valuable on account of requiring such a short season to make a fine crop of most excellent hay. For this reason it is much used as a catch crop. It can be sown as late as the 4th of July with good results, in ordinary seasons. It is much used for following such crops as early potatoes and barley for a crop of hay, thus giving two crops on the same land in one year. Hungarian Millet does not grow so coarse as some other varieties, but still yields quite heavily, from 2 to 4 tons of hay to the acre, being an ordinary crop. Hay is quite leafy, of very fine quality. PRICE: Bu. (50 lbs.), \$1.75; sacks free.

Ratekin's New Mammoth Russian Sunflower Sunflower seed is one of the best egg producing foods for poultry. It can be sown any time before the middle of July. Plant in hills $3\frac{1}{2}$ to 4 feet apart each way, or in drills. Seeds are the best of food for poultry, and is much cheaper to raise than corn. Only those who have tried it realize what an important crop the sunflower proves to the poultry and hog raiser. The poultry man well knows the egg producing properties of sunflower seed. It is also very fattening and contains a very high percentage of protein. Sow the seeds in rows far enough apart to admit of cultivation. Two to three pounds will plant an acre. The plants will grow from 6 to 10 ft. high and will be literally covered with large heads well filled with seed. In feeding to both poultry and hogs all that is necessary is to allow them to help themselves. Large pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 25c, postpaid. By express or freight, lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00.

Ratekin's New Russian Flax This seed came from Russia, the home of tremendous flax yields, the land of strong, hardy, vigorous varieties of flax, the place where flax produces all the way from 40 to 75 per cent more per acre than here in America. Our seed has been grown in this country. It is thoroughly acclimated and is ready to show you what it can do. Growing flax pays. It pays big, even if you plant but 5 or 10 acres. Our New Russian Flax is immense. It outyields any other variety known so far; it is very early, of vigorous growth, drought and insect proof. It is singularly free from disease and shows its Russian vigor from the start. PRICE: Pkg., 5c; lb., 25c, postpaid. By freight, peck, 75c; bu., \$2.50. Bags free. Write for prices on large quantities.



German Millet.
Southern Grown Seed.

seed per acre. The seed lower price than usual.

1 lb., 10c; 15 lbs., \$1.25; 50 lbs., \$4.00; 100 lbs., \$7.50.

Kursk Millet

It ranks very high both as a hay and seed producer, and in dry years the weight and quantity of hay have been far superior to other sorts.

Hungarian

Often called Hungarian Grass. Many regard this as being better even than German Millet, as it is about one week earlier and requires less moisture.

It is much used for following such crops as early potatoes and barley for a crop of hay, thus giving two crops on the same land in one year.

Hungarian Millet does not grow so coarse as some other varieties, but still yields quite heavily, from 2 to 4 tons of hay to the acre, being an ordinary crop.

Hay is quite leafy, of very fine quality.

Ratekin's New Mammoth Russian Sunflower

Sunflower seed is one of the best egg producing foods for poultry.

It can be sown any time before the middle of July.

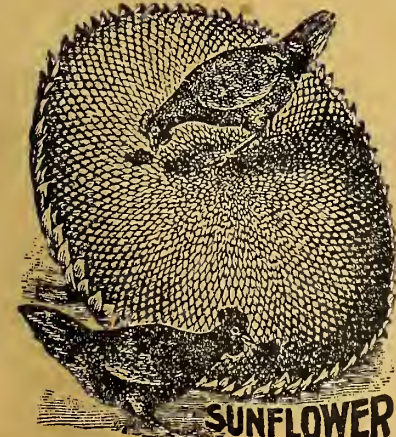
Plant in hills $3\frac{1}{2}$ to 4 feet apart each way, or in drills.

Seeds are the best of food for poultry, and is much cheaper to raise than corn.

Only those who have tried it realize what an important crop the sunflower proves to the poultry and hog raiser.



Japanese Millet.



SUNFLOWER

Root Crops; Valuable Money Making and Money Saving Crops

Sugar Beets and Mangel Wurzels--Corn Savers

Extensively grown in all parts of the country for feeding stock. If your soil is deep and mellow, try the long varieties; if shallow, the round kinds will do better. No crop pays the farmer and stock raiser better than mangels; 1,000 bushels to the acre is an ordinary yield, while with good culture, 2,339 bushels have been grown to this amount of ground. If costs, counting labor, use of ground and everything, less than \$50 to raise an acre of mangels and gather and store them. This, for an ordinary yield, is a cost of only five cents per bushel. They make the cheapest of foods for all kinds of live stock—horses, cattle, sheep, pigs, chickens, etc. Easily grown, and they help to keep stock in good condition and free from disease. Dairymen claim that a bushel of mangels and a bushel of corn are worth more than two bushels of corn. Use six pounds to an acre.

Seeding and Cultivation

Where mangels are extensively grown, the seed should be sown with a machine. Small fields may be sown with a hand drill, which will do good work and is very satisfactory. Do not crowd the rows because much of the root grows above the surface and plenty of space should be allowed for a horse and cultivator. Three feet apart is about right.

Freezing injures beet plants. Therefore, seed should not be sown until the ground is warm and the weather fully settled, say about corn planting time.

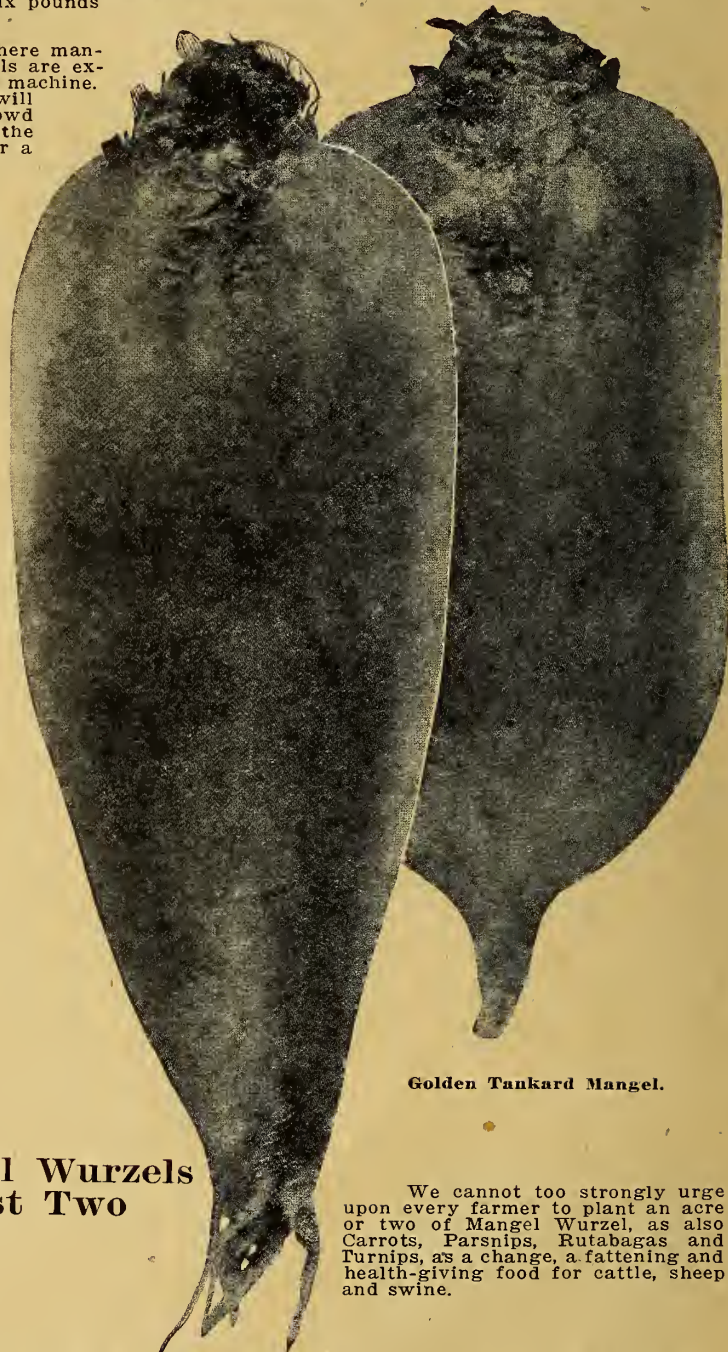
The quantity of seed required per acre will vary somewhat with the variety. It pays to be generous with the seed and insure a good stand of plants. Shallow planting is desirable, because the seed germinates more quickly and a larger proportion will make vigorous plants than when planted deeply. One-half to one inch of well packed earth is sufficient covering for beet seed, when there is a good supply of moisture in the sub-soil. Deeper planting will be required on sand lands or when the soil is dry. Cultivation should begin within a few days after planting.

Culture: Sow 6 pounds to the acre in May or June, in rows three feet apart, and thin to nine inches in the row. Cultivate frequently with horse tools.



Crimson Tankard.

Mangel Wurzels Best Two



Golden Tankard Mangel.

We cannot too strongly urge upon every farmer to plant an acre or two of Mangel Wurzel, as also Carrots, Parsnips, Rutabagas and Turnips, as a change, a fattening and health-giving food for cattle, sheep and swine.

Crimson Tankard In appearance it closely resembles the favorite—Golden Tankard. It is adapted to all soils, is easily lifted from the ground, and is a very productive sort. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c, postpaid. By express or freight, at purchaser's expense, lb., 40c; 10 lbs. at 35c lb.

Ratekin's Mammoth Long Red Mangel

Farmers and stock raisers of the United States do not appreciate so fully the value of mangels for feeding cattle, hogs, sheep, etc., as do the farmers of Europe. In Germany, Great Britain and other European countries, it is the exception rather than the rule where mangels are not grown on a large scale on every farm. Every farmer ought to put in at least an acre of Mangels this coming season, 5 or 10 acres will be much better. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c, postpaid. By express or freight at purchaser's expense, lb., 40c; 10 lbs. at 35c.

(Continued next page.)

Mangel Wurzels Beets—Continued

The immense yield which may be secured from an acre of Mangel Wurzel Beets with so little expense either for material or labor, make the mangel crop one of the most profitable on the farm. Fifteen to twenty tons of roots an acre is not an unusual yield, some specimens weigh 20 to 30 lbs. each. Where properly cultivated, seeded and harvested the cost of growing a bushel of our Improved Mammoth Long Red Mangel should not exceed 5c. When fed in combination with grain they are worth almost as much, pound for pound, as the grain. This statement may seem absurd, but experience has proved that mangels so aid digestion and assimilation, by keeping the animals in a healthy condition, that they increase the feeding value of other feeds consumed, beside the nutrients the roots contain.

Our stock of Improved Mammoth Long Red Mangel is a selection and the seed is especially grown for us in Europe. The roots are very large, uniformly straight and well formed; color, deep red; roots, straight; tops, small.

Golden Tankard Mangel An improvement on the long, yellow mangel, being of considerably greater size, more than half above the ground and of a more grayish or rather russet yellow. Remarkably even in shape, rather elongated, of vigorous growth; it has a fine neck and a very smooth skin; flesh white, firm and sweet; much liked by cattle; a magnificent root, easily lifted from the ground, producing enormous crops. Excellent keepers; yields forty to sixty tons per acre. **PRICE:** Per oz., 5c; ¼ lb., 25c lb., 60c. By express, not prepaid, 5 lbs., \$2.00.

Champion Yellow Globe Finest type of yellow globe in cultivation. Roots immense size, fine shape, small tap root, neat top. Flesh being very firm and fine grained, renders it an excellent keeping variety. Well adapted to shallow soils and has a record of producing **106 TONS PER ACRE**. This immense crop was grown by sowing seed in drills 14 inches apart and thinning to 10 inches in the row. Our seed of this variety is particularly choice. **PRICE:** Per oz., 5c; ¼ lb., 25c; lb., 60c. By parcel post or express, at purchaser's expense, 5 lbs., \$2.00.

Danish Sugar Beet An improved strain of the White French Red Top Sugar Beet, which is wonderfully fine for feeding to milch cows, and will add greatly to the milk production as well as to its richness. It will yield as much as most varieties of mangels, and we consider it of superior feeding value. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c. By express, 5 lbs. or more at 50c per lb.

Giant Half Sugar Mangel This is a hybrid or cross between Mammoth Long Red Mangel and Sugar Beet, and for our own feeding we have found it superior to either. Being sweeter, both cattle and hogs relish them. **PRICE:** Per oz., 5c; ¼ lb., 25c; lb., 60c. By express, at purchaser's expense, 5 lbs., \$2.00.

For Sugar Making Sugar Beets are now extensively grown in many sections of the country where sugar beet factories are located and the large yields per acre and the price secured for the crop make them very valuable. Sugar beets may also be used for stock feeding as they contain 12 to 15 per cent of sugar in addition to other nutrients. Sugar beets are ripe and in condition to harvest when the lower leaves begin to take on a yellow tinge and droop. Beet tops make an excellent food for cows, sheep and other live stock. This is also true of the pulp from the factory.

Seeding and Cultivation As in the case of mangel, the best seed obtainable, regardless of the price, is the cheapest in the end. Sugar beet seed is not a high priced article, and the expense of seeding an acre of land is very small when compared to the value of the crop. A maximum yield of 15 to 20 tons an acre is possible with the best seed, while lower priced seed may produce barely enough to pay the cost of cultivation and handling.



The above is perhaps a more typical illustration of the Mammoth Long Red Mangel stock of Beet, showing top, than the illustration on page 52.

The time of planting should be determined by the condition of the soil, the locality and the season. Sandy soil becomes warm and dry much earlier than heavy clay loam. Tillage also has a tendency to increase the warmth in the soil. Do not plant sugar beets until the soil is warm enough to germinate corn. When oak leaves burst their buds, corn and beets may be planted with safety. Be liberal with the seed in order to secure a good, uniform stand of plants. A surplus is much more desirable than thin seeding. It often happens that a crust is formed on the surface which a scant seeding will not break through in the plants' effort singly, to reach sunlight, but collectively they will aid each other in breaking the surface. The depth of planting must also be determined by local conditions of the soil, season, etc. Deep planting should be avoided, because it often prevents germination when shallow planting, say one-half to one inch, will produce satisfactory results. The distance between rows will depend somewhat on the soil and methods of cultivation employed. Rows 18 inches apart will produce the largest returns in yield, but these cannot be cultivated with a horse. Hand labor is expensive; therefore, we advise planting 20 to 24 inches between rows, using a 4 to 6-row planter for the purpose.

Cultivation should commence immediately after planting by following the rows indicated by the press wheel. Before the plants appear, cross rows with a light hand weeder made by driving tenpenny nails through a board, and used as a harrow, which will break the surface crust and maintain an earth mulch to prevent the escape of soil moisture. This process may be repeated two or three times with excellent results.

Klein-Wanzleben Also called Diamond Sugar Beet. This variety is cultivated on a larger scale for the best sugar factories than any other, as it usually yields 15 to 20 per cent of sugar. Root is of shape straight, tapering evenly, and somewhat screw shape. Our seed is grown in Germany from beets which were tested as to per cent of sugar before setting out. The heavy per cent of sugar makes it also of great value for feeding. **PRICE:** Per oz., 5c; ¼ lb., 25c; lb., 60c. By express, at purchaser's expense, 5 lbs., \$2.00.

Jaensch's Victrix Undoubtedly the most highly developed variety for sugar making. Roots of medium size, white skin with tinge of gray, half long and very uniform in size and shape. Flesh white and very rich in sugar. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c, postpaid. By express or freight, lb., 40c; 10 lbs. @ 35c.

Vilmorin-Elite This beet is the result of thirty-five years of methodical and persevering selection. In black soils rich in organic matter, it gives results equal to any other variety. Its average yield may be stated as from 12 to 16 tons an acre. **PRICE:** Oz., 5c; ¼ lb., 15c; lb., 45c, postpaid. By express or freight, lb., 35c; 10 lbs. @ 30c; bags free.

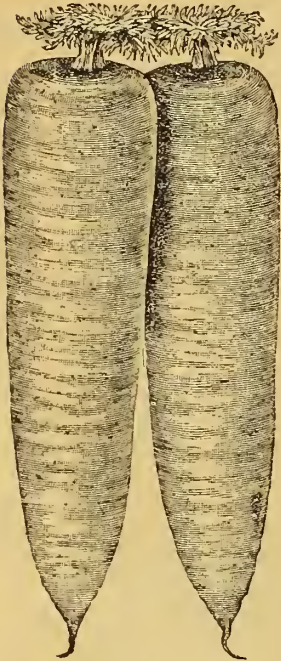
Giant Feeding Sugar Beet or Half Sugar White Mangel This magnificent sugar beet while giving nearly as large a yield of easily grown and harvested roots as a crop of Mangels, supplies a food of very much higher nutritive value, the roots for feeding purposes being really more valuable, pound for pound, than those of the very best strains of Sugar Beet, and the yield under equally favorable conditions being more than double. The roots grow partly out of the ground and because of this and their shape the crop can be harvested and stored at less expense than any other root crop. We are certain that everyone who plants this variety, and grows it with care will be much pleased. Every farmer should try it. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c, postpaid. By express or freight, lb., 40c; 10 lbs. at 35c.

Ratekin's Mastodon Carrot For Stock Corn Savers

Every Farmer Should plant a few acres of Carrots for stock food; they are very productive, less liable to disease than many other root crops, and, being sown earlier, do not interfere so much with the labor in the busy time.

The Mastodon Stock Carrot RATEKIN'S Mastodon Carrot is not a table carrot, although the flesh is remarkably firm and sweet. It is not a carrot for the market gardener, but it is emphatically the carrot for the farmer, and once used, nothing else will take its place. Glory enough! There may be difference of opinion regarding many varieties of seeds, but there is no room for difference of opinion as to which is the best stock carrot. The Mastodon is the one to plant.

The Mastodon Carrot is the heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is white, crisp and solid and very sweet in flavor. It is a vast improvement on the white and green Belgian sorts which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are short and very heavy at the shoulder, rendering them easily harvested. An important feature, also, is that they do not easily break in pulling or sorting. Too much can scarcely be said of their size and great productiveness. The roots frequently measure 15 to 20 inches in circumference, and 20 to 40 tons to the acre is not



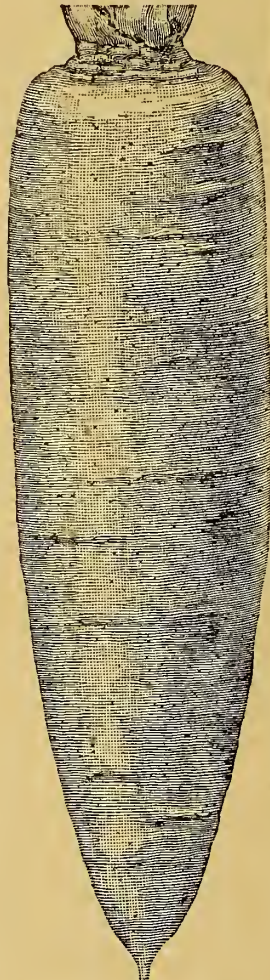
LOBBERICH'S
AGRICULTURAL CARROT.

an extravagant statement as to yield. Large pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00, by mail, postpaid. By express, at purchaser's expense, 5 lbs. and upwards at 80c per lb.

The Lobberich is a very large and a very rich stock carrot. There can be only one best stock carrot, and we think our Mastodon is that carrot, yet there are many who prefer a yellow carrot. We can say to such that there is no yellow carrot which can approach the Lobberich in size, in yield and in feeding qualities. It is the largest and best form of Orange or Yellow Carrot known or ever offered to American farmers. It is of a rich yellow color, stump rooted, and grows to a very large size. We have received countless testimonials of its great availability and worth. It has proved to be a most valuable carrot for stock feeding, and in my own comparative trials it far outyields other sorts. It is remarkably free from toughness; while in its young state it may be used for culinary purposes, as it cooks sweet and tender. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Long Lemon Carrot

A very large and a very rich stock carrot. There can be only one best stock carrot, and we think our Mastodon is that carrot, yet there are many who prefer a yellow carrot. We can say to such that there is no yellow carrot which can approach the Long Lemon in size, in yield and in feeding qualities. It is the largest and best form of Orange or Yellow Carrot known. The roots are remarkably fine, very symmetrical and of excellent quality, possessing high feeding properties. It is a heavy cropper on all soils, but is especially adapted for rich, strong land. It grows nearly half as much weight again an acre as the ordinary varieties, and as the roots grow more above the ground it is much easier to gather the crop. This grand variety is sure to suit everyone who grows it. Large pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00. By express or freight at purchaser's expense, 5 lbs. and upwards at 80c per lb.



LONG LEMON
STUMP-ROOTED CARROT.



Mastodon
Carrot.
20 to 40 tons
per acre.

Reduced in Size.
Important—Owing to the large size which these carrots attain, less seed is required to the acre than of any other sort—2 lbs. an acre being sufficient.

Ruta Baga or Swede Turnip, Imported Stock



**Ratekin's
Improved**

**American
Rutabaga**

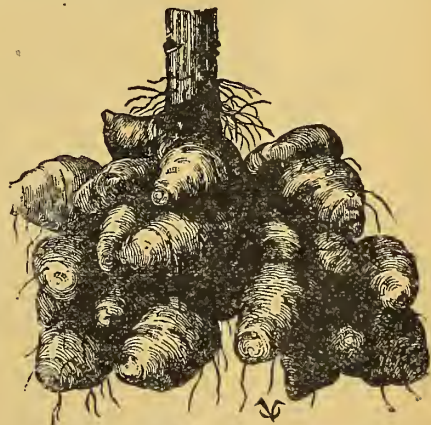
most productive, a yield of 1,000 bushels per acre and over, under careful cultivation, being of frequent occurrence. Bulbs are somewhat oval in shape, slightly oblong, and remain sound and good indefinitely. Flesh is of a beautiful yellow color, always sweet, tender, juicy and nutritious. The finest of all Swedes, and a variety that should be sown in preference to others. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; ½ lb., 35c; lb., 60c.

Improved Purple Top A large early sort of fine quality. Roots globe-shaped, skin purplish red above and yellow below; flesh yellow; necks small. An excellent variety in every way. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Jerusalem Artichokes The new, large Jerusalem Variety. A well-known vegetable produced from tubers like potatoes, which they resemble somewhat. Excellent food for stock. Do best in light, rich soil with an open exposure, but will resist any degree of cold incident to the United States. Planted like potatoes and as early as the ground will permit in May. Can remain in ground all winter, as freezing does not hurt them. Yield from 500 to 1,000 bushels per acre. An excellent food for cattle, sheep and milch cows. But their greatest value is food for hogs. Even the labor of feeding is avoided, as the hogs will help themselves if allowed to do so. We consider them the cheapest, healthiest hog food possible to raise. Hogs will not only grow, but fatten on them.

PLANTING, CULTURE, PRICES, ETC.: Artichokes need planting but once and little or no culture after the first year. Cut as potatoes; plant in rows three feet apart. Plow deep, plant shallow, say two inches. Drop the pieces 15 to 20 inches apart in row. **PRICE:** 1 lb., 30c; 4 lbs., \$1.00, by mail, postpaid. By freight or express: 1 bu., \$1.60; 5 bu. and over, \$1.50 per bu. (Four bushels sufficient for one acre.

Chufas (Earth Almonds) A species of ground-nut, forming an abundance of small tubers on its roots; greatly liked by children. In flavor resembles the cocoanut. Very prolific, a single one yielding 200 to 400 nuts growing just under the ground and easily reached by pigs and poultry if they have access. Grow best in light, sandy soil, well fertilized. Easily harvested and furnish one of the most valuable fattening feeds for hogs and poultry. Plant in April and May in rows two or three feet apart, dropping the roots four inches apart. Give shallow cultivation. The tubers mature in September and can remain in the ground until needed. One peck will plant one acre. Chufas are one of the best fattening feeds we know of, and farmers are more and more realizing their value. The tops, if properly cured, furnish an excellent hay which is highly relished by all kinds of stock. They are also greatly liked by wild ducks. Pkt., 10c; ¼ lb., 20c; lb., 50c, postpaid; by freight or express, peck, \$2.25; bu., \$7.50.



JERUSALEM ARTICHOKE.

Are you aware that Ruta Bagas, or Swedish Turnips, are among the most valuable root crops?

AN EMINENT authority on agriculture never made a more truthful statement than when he said: "As compared with hay at \$10 to \$15 per ton, I prefer Ruta Bagas at \$5 per ton." An average yield of 20 to 30 tons to the acre is common.

If sown the last of July or the first of August, they make an excellent pasture for sheep during the fall months, and the bulb or turnip will furnish a rich food for them all winter. All kinds of stock, relish and fatten upon them, when fed in combination with hay. Send to Secretary of Agriculture, Washington, D. C., for Special Free Bulletin on Root Crops.

CULTURE: Rutabaga seed should be sown three or four weeks earlier than that of the table varieties of turnips. The ground should be enriched with well rotted manure and the seed sown in drills two and one-half inches apart and thinned out to six or eight inches in rows. When the roots have fully matured and before severe weather sets in, pull, cut off the tops, and store them in a root cellar or pit.

Ratekin's Improved American Rutabaga

A Prize Winner Everywhere.

Our special strain of Improved American leaves nothing to be desired. It is the best and heaviest cropper of all rutabagas. This variety has been grown and improved for years to meet the wants and trade of the most critical gardeners. It is of fine form, with a rich purple colored top and yellow flesh of very pleasing appearance. Flesh is tender and sweet and exceptionally free from stringy, hard flesh. It has a comparatively small top, fine roots, and is the surest and heaviest cropper. If you grow rutabagas you need our "Improved American." **PRICE:** Ounce, 5c; ¼ pound, 15c; pound, 50c, postpaid.

Mammoth White Russian

One of the Best in Cultivation.

One of the grandest sorts. Grows very large with single tap root, small top, short neck. Strong constitution; certain cropper. Will stand severest weather. Produces a very heavy weight per acre. Keeps sound till late Spring. The best Rutabaga in cultivation. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 15c; ½ lb., 25c; lb., 50c.

New Monarch, or Elephant

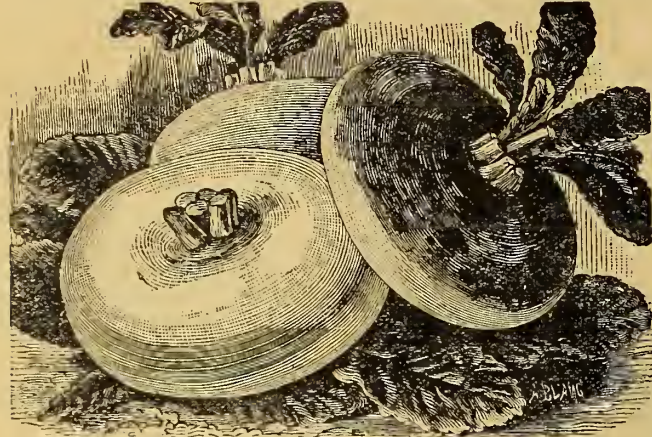
This magnificent Rutabaga, first offered in 1907, is unquestionably one of the most profitable of all Swede Turnips, as well as the hardiest, heaviest, best shaped and by far one of the

Make the Land Produce EVERY POUND OF FEED PER ACRE THAT YOU CAN. Every plant to the farmer. In this department will be found a number of items which, if properly used, will solve the problem of feed for the live stock when corn, hay and pasturage are short from any cause. Amber Cane or Kaffir Corn for fodder; Rape or Kale for pasturage; Vetch or Field Peas for hay can be used by any farmer in the corn belt with profit. All may be siled with corn to advantage. Don't neglect the root crops. They are grown at almost no cost. They are not only money savers, but money makers.

Ratekin's Turnips

CULTURE.—Sow early varieties in April, in drills 12 to 18 inches apart. Cover seed $\frac{1}{2}$ inch and thin out to 4 to 6 inches in the row. Cultivate frequently. For succession sow at intervals

until the last week in May. For Fall and Winter crop, sow in July or August in drills or broadcast. Use 1 ounce to 250 feet of drill; $1\frac{1}{2}$ pounds to acre in drills or $2\frac{1}{2}$ pounds broadcast.



Early White Flat Dutch—Early Red or Purple Top

Early White Flat Dutch An old standard by and one of the most popular early varieties for either spring or fall planting. Of medium size, and a quick grower. Is flat, as shown in the illustration, with very small, fine taproot. Flesh and skin pure white; fine grained and sweet. **PRICE:** Oz., 5c; $\frac{1}{4}$ lb., 15c; lb., 50c, postpaid. 10 lbs., not prepaid, \$4.00.

Early Red or Purple Top This is another popular variety of early flat Turnip, being almost identical with Flat Dutch, except for the deep red or purple color of the skin at the top of the bulb. Known in many sections as the Purple Flat Dutch. It's a quick grower with very fine-grained, sweet-flavored flesh. The red top of the bulb extending down to where it rests in the soil adds very much to the attractive appearance of this popular variety. **PRICE:** Oz., 5c; $\frac{1}{4}$ lb., 15c; lb., 50c. 10 pounds, not prepaid, \$4.00.

Extra Early White Egg The finest flaved of all early turnips, and with favorable seasons is ready for table use in six weeks from sowing. Skin and flesh are a pure snow white; solid, fine grained, sweet, and a good keeper. Looks very attractive bunched for sale, and gardeners with this variety have no difficulty in selling at top prices. **PRICE:** Oz., 5c; $\frac{1}{4}$ lb., 20c; lb., 60c. 10 lbs., not prepaid, \$4.50.

Extra Early Milan The earliest of all Turnips. A flat, purple top variety, resembling the Early Red or Purple Top very closely, but is two weeks earlier. Perfect in shape and color, sweet and fine grained. Seed supply very short. **PRICE:** Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c.

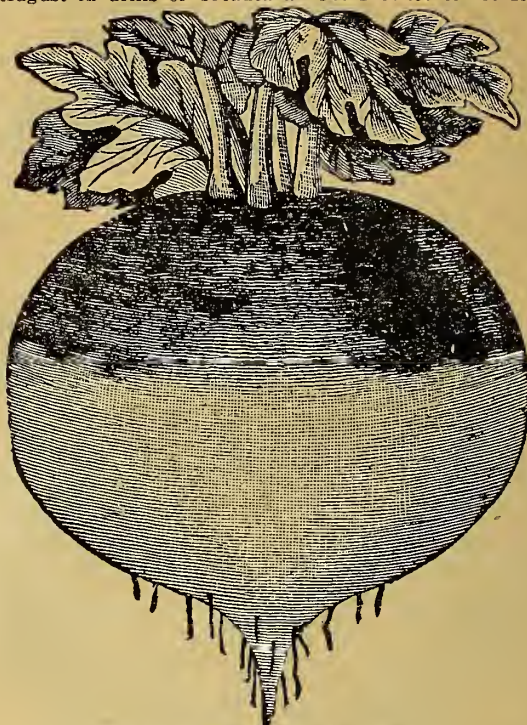
Ratekin's Big Turnip Collection

The most popular of all turnip collections. This gives every family a supply of early, medium and late turnips. No other house in America offers you such a bargain in turnip seed as this. For 30 cents we will send you postpaid one ounce each of Extra Early White Egg, Purple or Red Top Strap Leaf, Early White Flat Dutch, Purple or Red Top Globe, Yellow or Amber Globe, Improved American Rutabaga and Seven Top—7 ounces of Turnips, all different, for 30 cents, delivered at your post-office. No other varieties will be sold at this price and no changes will be allowed in this collection. If you do not want to plant all this seed this spring, what you hold over is perfectly good for your late summer and fall sowings.

Ratekin's Mixed Turnip A splendid mixture of our own containing some of each variety of Turnips and Rutabaga catalogued by us. This mixture is made to supply the demand of the thousands of planters who wish to make only one sowing and at the same time have a succession of Turnips to supply them all through the season. This mixture contains all the early, medium and late varieties and "sailad" varieties for "greens." **PRICE:** Oz., 5c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Secaucus, New Jersey, Jan. 17th.
Ratekin's Seed House:—I ordered and received my seeds from you last year and had the best luck and crops from them that I have ever grown and wish to send to you again this year, but have not received your catalogue for this year. Please mail one to my address by return mail, meantime beg to remain,
Yours truly,
WILLIAM REINE.

OUR PRICES INCLUDE POSTAGE

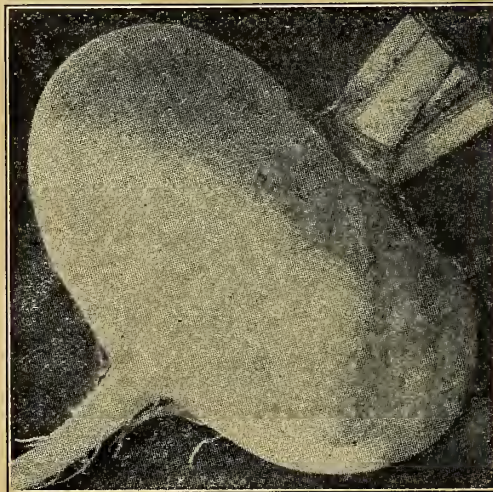


Purple or Red Top Globe Turnip.

Purple or Red Top Globe Our most popular variety for general planting. Is medium early, globe shaped, handsome appearance and a heavy cropper in all parts of the United States. You cannot plant too many of them either for home use or market. Always of good quality, a good keeper and seller in the market. **PRICE:** Oz., 5c; $\frac{1}{4}$ lb., 15c; lb., 50c, postpaid. Ten pounds, not prepaid, \$4.00.

Early Snowball Extra early variety. Perfectly round, pure white, solid, sweet, with short top. **PRICE:** Oz., 5c; $\frac{1}{4}$ lb., 25c; lb., 75c, postpaid.

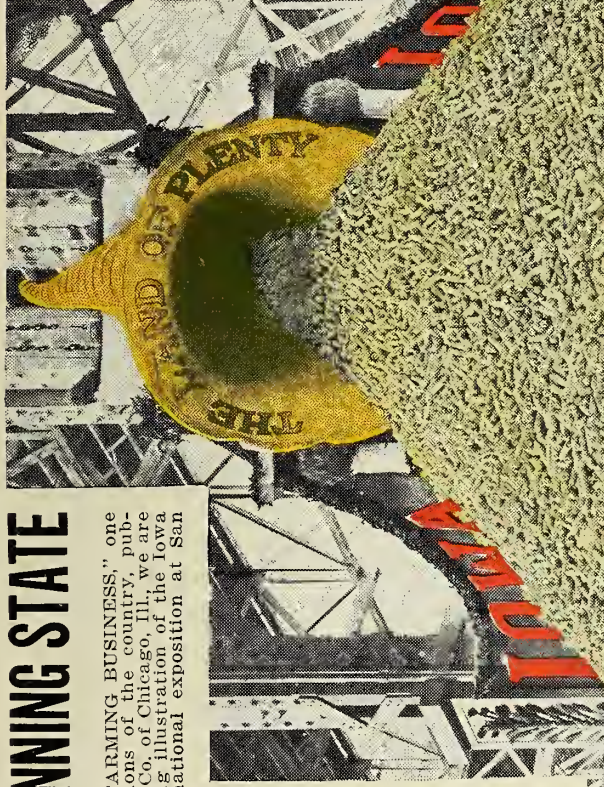
Golden Ball A splendid yellow variety; fine grained, medium size, as round as a ball, with color of a deep orange. Of medium size; a rapid grower, maturing early. This is the finest flavored of all the yellow varieties for table use. **PRICE:** Oz., 5c; $\frac{1}{4}$ lb., 20c; lb., 60c, postpaid.



Purple Top, Strap-Leaved The most popular sort. A general favorite with all, and more largely grown than any other turnip; will do well to sow either broadcast or in drills, and will form good sized bulbs in seven or eight weeks. Rather flat and of medium size. Color purple above ground, white below; flesh white, fine grained and tender. **PRICE:** Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

IOWA the PRIZE WINNING STATE

Through the courtesy of "THE FARMING BUSINESS," one of the leading agricultural publications of the country, published by the W. D. Boyce Publishing Co. of Chicago, Ill., we are permitted to display the accompanying illustration of the Iowa exhibit at the Panama-Pacific International exposition at San Francisco, in 1915. In speaking of this exhibit, "The Farming Business" says: "What was one time a sort of favorite saying among Iowa orators will probably now become the official state motto and mystic saying: 'Of all that is good, Iowa affords the best.' And there seems to be plenty of reason for the Iowan's fondness for that saying. They are proving the truth of it not only to themselves, but to the world at large. Iowa people certainly have some strong facts in support of their contention."



IOWA, BILLION DOLLAR STATE

"In addition to being awarded the grand prize at the Panama-Pacific exposition at San Francisco, it is a noteworthy fact that out of 289 Iowa exhibitors all won prizes for individual displays. The display which won the grand prize for Iowa occupied one of the best spaces in the agricultural building. The central feature was a horn of plenty, from which flowed fine IOWA CORN. This display heralded Iowa as the only Billion Dollar State in the Union. It showed Iowa's field crops and live stock in 1914 were valued at One Billion, Forty Million, Seven Hundred Sixty Thousand Nine Hundred and Nineteen Dollars. **Corn—Good Iowa Corn—** has been the chief product of Iowa for the past fifty years, to which may be attributed all its wealth. Our advice is, to **grow corn.**"



The Golden Horn of Plenty Which Won for Iowa the First Prize for Artistic Agricultural Exhibit.

Ratekin's

PRICE.—1-2 pk. prepaid, \$1.25; Express or freight not prepaid, pk. \$1.00; 1-2 bu. \$1.75; bu. \$3.50; 2 bu. \$3.40 per bu.; 5 to 10 bu. and over \$3.25 per bu., bags included.

MAMMOTH IOWA YELLOW DENT

The World's Greatest Yellow
Dent Corn

FOR FULL DESCRIPTION AND
HISTORY, SEE PAGE 15
THIS BOOK

Ratekin's Mammoth Iowa Yellow Dent

FAMOUS FOR ITS HIGH YIELDING QUALITIES AND EARLY MATURITY

What
Intensive
Farming Means

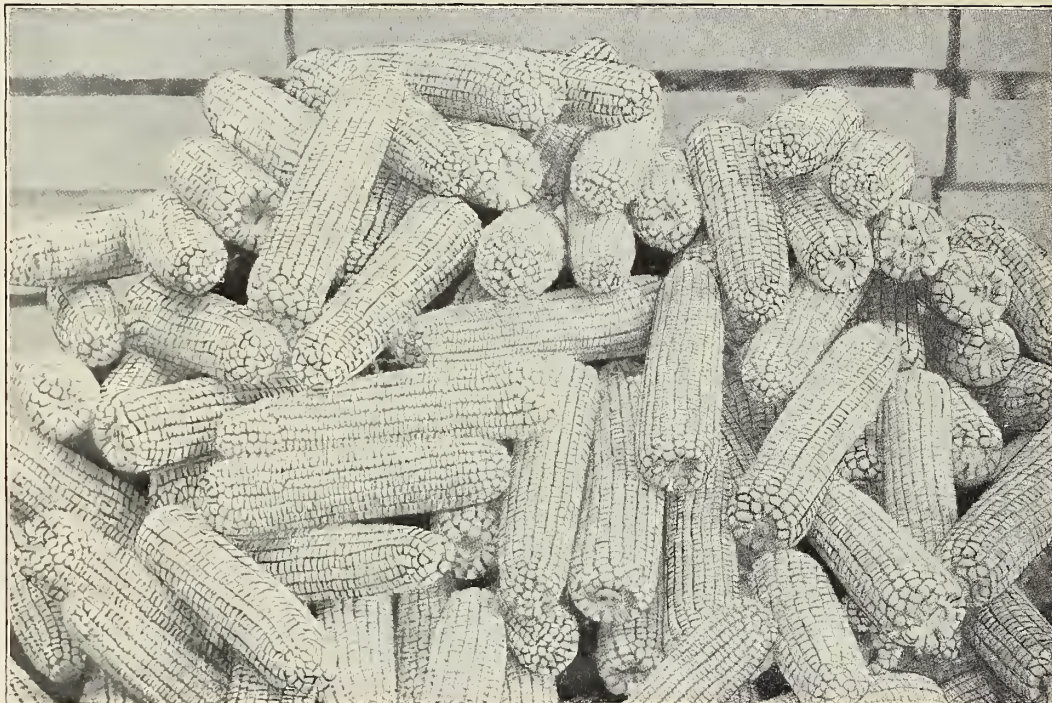
Intensive Farming Means Specialized and Scientific Methods—Devoting Knowledge and Skill to Certain Crops and their increased yields. First by planting thoroughbred varieties only of inherited stock. Second, good land, with a thoroughly prepared seed bed. Third, proper and thorough cultivation at the right time. We can furnish you the seed but it is up to you to mix the dough. Do your part and you will produce corn crops equalling or surpassing the enormous yields recorded in preceding pages. We want a thousand boys and girls or more, to enter our corn-growing contest and to send us a record of their experience, and if all those who report, as per our specifications on page 26 and will also send us a photograph we will have all grouped together and an illustration run in some of the leading American agricultural publications and will supply each contestant with a copy of same. Already a number of these publications have requested of us when the final report was made to supply them with data and pictures of contestants.

(See conditions and specifications of this contest on page 26, this book)

SEED CORN WITH A RECORD---THOROUGHbred---PEDIGREED

Ratekin's Diamond Joe's Big Early White Dent Corn

Largest Eared, Early Maturing White Corn in the World



This Famous Variety of Corn is One that Never Fails to Make Good.

CAN YOU AFFORD POOR SEED CORN?

Seed corn at \$1.00 per bushel costs from 12 to 17 cents per acre.

Seed corn at \$3.50 per bushel costs 50 cents per acre.

A bushel of seed which increases the yield five bushels per acre at 50 cents per bushel is worth \$17.50.

Seed corn which costs \$3.50 per bushel must produce, in order to pay for itself, one bushel more of corn per acre than seed corn that costs nothing per bushel.

The loss on a bushel of seed corn which gives a 50 per cent yield is \$15.00 to \$30.00 spent as rent of land not producing anything, and time spent in plowing and cultivating land without a crop. The only difference in cost of crop is, it don't cost as much to haul it to market, but costs about the same in every other detail.

Diamond Joe's Big Early White

is the corn for you to plant. It's cheap at the price we sell it at. It's grand, grows more bushels on good land and does better on old or thin land than any other kind. It's always a sure cropper and a tremendous yielder on any kind of soil. It's early to mature. It scoffs at drought or rain or bad weather. It defies the elements and always returns yields that please, profit and astonish you. **PRICE:** ½ peck, postpaid, \$1.25. Express or freight, not prepaid: Peck, \$1.00; ½ bu., \$1.75; bu., \$3.50; 2 bu., \$3.40 per bu.; 5 to 10 bu., \$3.25 per bu.

Ratekin's Mammoth Iowa Yellow Dent is the full counterpart of Diamond Joe's Big Early White, but like all yellow varieties, are not as drought resistant as the white varieties, nor will they yield as heavily on old, poor or thin land as the white varieties, however, will do equally as well on good corn land under ordinary or normal conditions. **PRICE:** Same as Diamond Joe's Big Early White.

With regard to other varieties, outside the two above mentioned, would say they are all the most choice and productive varieties there is grown or in cultivation. If there were others better we would adopt and grow them. But among our varieties all have their friends and are great favorites with those who have planted and grown them. Then again there are some varieties that are specially adapted to certain conditions, climate, soil, seasons and altitudes which are not suited to other localities and places; therefore it is up to the man who plants and sows to make his selections from those varieties most suitably adapted to his locality and for his purposes. To enable our customers to do this we have aimed to give fair and honest descriptions of all our varieties, without exaggeration or buffoonery sometimes resorted to by a few seedsmen.

What We Have Aimed to Do has been to give the farmers and our friends the best farm guide and seed catalog in America; to help and assist our customers to grow BIGGER AND BETTER CROPS—MORE BOUNTIFUL YIELDS; to maintain, build up and extend our trade and sales to the remotest part of every neighborhood, township and locality in the United States. Believing that the best is none too good for the farmer and his family, we pledge ourselves in our efforts, to inspire right thinking and more intelligent farming, which contribute to better homes and more of this world's comforts. "Good results makes good customers."

Again, before closing this page, we wish to appeal to the BOYS AND GIRLS; their Fathers and Mothers, to encourage your Boys and Girls to get into our "Boys' and Girls' Corn Growing Contest." These contests are of great educational and inspirational value, whether you win a prize or not, and should be fostered in every possible manner. Nothing in the progress of time has ever before been thought out that has given such emphasis to progressive farming as these Boys' and Girls' Contests. They have almost revolutionized farming and farm methods, and made records almost unbelievable. What others have done, your Boys and Girls can do with your assistance, help and encouragement.

Ratekin's Choice Northern Grown Seed Potatoes

Potatoes CULTURE: Use 8 to 10 bushels of seed potatoes per acre. Cut to two eyes. Plant in rows 3 feet apart, and drop 10 to 12 inches apart in row. Cultivate constantly and thoroughly. Ridging with loose soil is often practiced, but it is not always necessary. Store in frost-proof cellar or pit in winter. Potatoes are planted both early and late.

Ratekin's Seed Potatoes—What They Are

Seed should imply. They are not only the best we can supply, but we try to have them the best to be had from any source at any price. To that end they will be hand sorted, selected stock such as anyone will be proud to plant.

Our Potatoes Are Grown in the Far North

Our stock is grown exclusively in the Red River Valley, North Dakota and Minnesota. "Red River" stock always commands a premium over potatoes produced elsewhere. No seed potatoes can be compared with those produced in the North, either for vigor and freedom from disease, or for producing and long keeping qualities.

Our seed potatoes are grown for us under contract, especially for seed purposes. We personally instruct our growers as to the best methods of cultivation and harvesting and our own men superintend loading of cars.

Our seed is clean, healthy and free from scab; and in order that the product may be equally so, we urge our customers to treat the seed they plant with Formaldehyde, as the soil may be infected.

There is profit as well as satisfaction in planting our seed, for, not only is it pure, but the additional yield to be secured from a change of seed will every time pay for the seed itself many times over, so that the investment itself is profit instead of expense. Think of 200, 300, 400, 500, and even 600 bushels per acre and then compare it with the average yield of potatoes from home grown sorts.

Date of Shipment

We ship our seed potatoes in the spring as soon as danger of freezing is over, so they will arrive in plenty of time for planting. All orders for potatoes are acknowledged as soon as received, and forwarded the first day that we feel that it is safe to start them. When shipment is ordered otherwise, shipment is made at purchaser's risk and we assume no responsibility on account of freezing. We do not charge for bags, hoxes or barrels. All potatoes are carefully packed and delivered to the railroad company in good order and condition, then our responsibility ceases.

Ratekin's Extra Early Potato

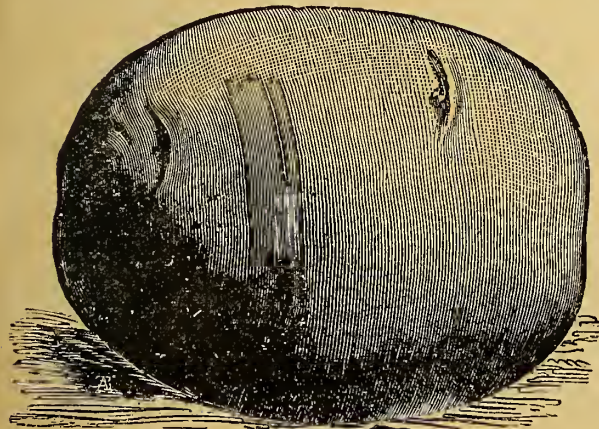
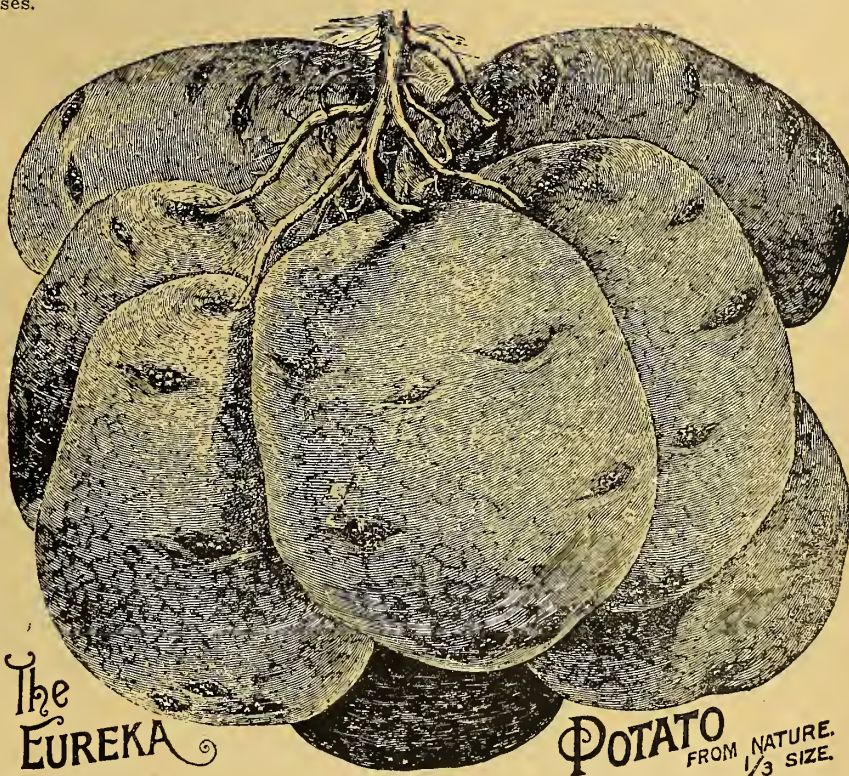
The Favorite Extra Early

None More Quick to Mature
More Proof Against Drought and Blight
So Free from Second Growth

As to its origin and history, the originator says of it: "Eureka Extra Early was a chance hill found growing in a field of Early Morn potatoes, season of 1895. In looking over the field a single plant was noticed distinct from the rest, which died while the others were still green.

"It has never failed to produce a large crop of extra early potatoes. The plant is dwarf and compact, maturing in advance of the Early Rose and Freeman. It never has had the blight. The tubers are round, slightly flattened. White Skin, free from disease. Flesh, white and mealy; no cores or black specks. Quality unsurpassed.

"One point alone which makes it valuable is that it has never taken second growth, and resists drought better than any other potato I have ever grown. North, South, East and West, Eureka the past summer came off with flying colors. I again advise early orders, for while my stock is large, the demand for Eureka is simply astonishing. PRICE: Per lb., 30c; 3 lbs., 75c, postpaid. By express or freight: Per peck., 75c; per bu., \$2.25; 5 bu. or over, \$2.00 per bu.



Bliss' Red Triumph, the Profitable Potato.

Bliss' Red Triumph

A Week Earlier
Than Rose

A Great Leader in the South

Bliss' Red Triumph The most profitable potato for the South. We sell as many Triumphs as all the others combined in the South. It's adapted to all parts of the South, from Kentucky to Florida, from the Carolinas to Arizona. It's an extra early, and with our pure Minnesota grown seed stock, it's the surest producer of any, while its handsome appearance when first dug makes it a ready seller at top prices on any market. It withstands heat and drought to a wonderful degree and makes a good crop when other varieties burn up and make nothing. Vines are smaller than other varieties, the strength of the plant going into making potatoes rather than into the vine. This is the right potato for you to plant if you want an extra early and sure cropping potato of the very best quality. It will give you entire satisfaction.

PRICE: Postpaid, 1 lb., 25c; 3 lbs., 60c. By freight or express, purchaser's expense: Peck, 60c; ½ bu., \$1.00; 1 bu., \$1.75; 5 bu. or more, \$1.60 per bu.

Seed Potatoes

PRICES on potatoes frequently change as the market advances or declines. If you want a quantity, write us for special quotation.

Ratekin's Extra Early Ohio Potatoes

Our Own Special Stock.

We consider these to be the earliest, purest and altogether the handsomest stock of Early Ohio Potatoes to be found anywhere. On these points we challenge comparison with stock from any other source. We do not admit that its equal exists among Early Ohio Potatoes. They are grown under conditions that make them cost more than common stock. They are selected with the utmost care and the result is such as to delight everyone who knows and appreciates a good potato.

The Early Ohio Potato is so well and generally known as to require no extended description. We believe it to be more popular than any other variety, which fact is evidenced by the very large demand we have for it. Our sales on this sort are many hundreds of bushels in excess of the quantity sold of any other one kind. They can be depended upon so uniformly to give a good yield under most all conditions and all soils and produce a tuber of an ideal size for early market use.

Notwithstanding its earliness, this potato keeps well. Our stock in the spring is as sound as a dollar.

The accompanying picture of Extra Early Ohio Potatoes in the illustration represents the stock we send out, smooth, uniform and of fine, typical shape. This potato is characterized by pink skin, shallow eyes, blunt ends and a slightly pebbled appearance, peculiar only to this variety.

In anticipation of the usual heavy demand we have now in stock a very fine and liberal stock of these excellent potatoes.

PRICE: Based on placing potatoes in bags, we quote, subject to market changes: 1 bu., \$1.60; 5 bu. and over, \$1.50.



Fancy Northern Grown Extra Early Ohio (Grown in Red River Valley).

Early Rose Potatoes "THE PURE QUILL"

An Old Standard Favorite Sort

Every farmer and gardener knows the Early Rose potato, and nothing need be said in its favor. It has no faults, except that ill treatment and neglect sometimes cause a poor or weak strain to be put on the market under the name of Early Rose seed potatoes. I have been at great pains, therefore, to get a true, strong strain of Early Rose grown in the far North, for my stock, and I can offer it as the purest and best that can be had. Indeed it is the old Early Rose itself, as vigorous and productive as ever. Early Rose will never go out of fashion as long as the original stock can be obtained. PRICE: Pound, 25c; 3 lbs., 60c, postpaid. By express or freight, not prepaid, 1 pk., 50c; ½ bu., 90c; bu., \$1.60; 5 bu., \$1.50 per bu.



Early Rose Potato.

Irish Cobbler An extra early variety maturing only a few days later than Early Triumph. Cobblers are preferred, however, to the Triumph on account of their color, which is a cream white. The tubers are round and uniform in size and shape. The eyes are strong and well developed and slightly indented. The flesh is white and of fine quality and flavor. PRICE: ¼ bu., 50c; 1 bushel, \$1.60; 5 bushels and over, \$1.50.

Burbank A STANDARD LATE VARIETY. Continues in good demand and is more largely used than any other. It is of good size, of fine form, and an excellent yielder. The flesh is white, very mealy and of fine flavor and quality. The best potato for baking. This variety is well adapted to heavy soils. PRICE: By freight, ¼ bu., 50c; bu., \$1.60; 5 bu., at \$1.50; by mail, 100 eyes, postpaid, \$1.00.

New (?) Varieties There is nothing sold from seed catalogues in which so much humbuggery is exercised as in the item of seed potatoes. During the past few years hundreds of alleged new varieties have been introduced and sold at high prices, and yet there are not to exceed ten or twelve standards and well-known sorts today.

DATE OF SHIPMENT—Potatoes will be shipped at any date ordered at purchaser's risk, but where no special instructions are given to the contrary, we will hold same until in our judgment there will be a minimum danger from freezing. Of the many varieties that claim public favor, we have selected the best in cultivation.

Seed Potato Eyes by Mail

The Best Way to Secure Planting Seed There are many people living in cities or towns who have a small garden and would like to devote a portion of it to potatoes, but do not feel like paying the freight or express charges on a small quantity of seed. By careful selection we take the very best potatoes, from which the eyes are cut. These are prepared in such a way that they will keep in good condition for a considerable length of time.

It has been conclusively proven that potatoes cut to single eyes give the largest yield and best results generally.

PRICE OF POTATO EYES, POSTPAID: Per 60, 60c; Per 100, \$1.00; per 250, \$2.25; per 1,000, \$8.00.

With careful culture sixty eyes produce four to five bushels; 250 eyes fifteen to twenty bushels.

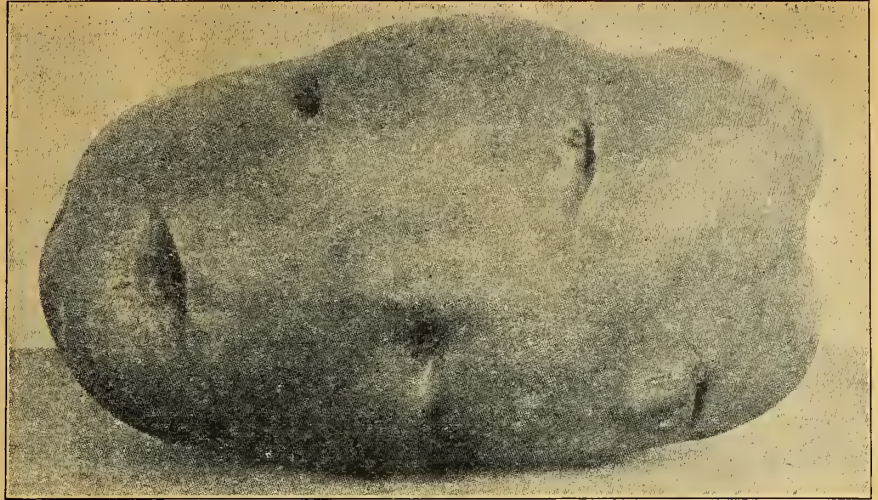
Seed Potato Prices Owing to the fluctuating market and the impossibility of accurately estimating future values at the time of going to press with this catalogue, all prices are subject to market changes. Those who do not care, to order seed potatoes until later should send for latest Price List before ordering. These lists are issued at frequent intervals during the season. Those wishing to buy in large quantities should write for special prices, stating varieties and number of bushels wanted.

Ratekin's New Majestic

RATEKIN'S Great Majestic was first offered to the public in 1910, since which time I have received hundreds of reports of field crops running up to 500 bushels per acre. On account of its earliness it is not affected by the usual midsummer droughts, while in keeping qualities it is unsurpassed by any variety under cultivation. The illustration does not in any way exaggerate its handsome appearance. It produces an unusually large proportion of merchantable tubers. The potatoes grow closely in the hill, and are large and nearly uniform size. It stands alone: The Great Majestic all purpose potato.

We wish we had space to tell you all we know about this wonderful Large Early Potato.

It stands to other potatoes as rich Jersey cream does to skimmed milk. As early as the earliest, and is better than the best. **PRICE:** Peck, 60c; $\frac{1}{2}$ bu., \$1.00; 1 bu., \$1.90; 5 bu., \$1.75 per bu.



Ratekin's New Majestic.

Carman No. 3

The Best Main Crop Potato.

The fame of this potato abroad in the land, and it is unquestionably the very best main crop late potato on the market. All the Carman seedlings (originated by Mr. Elbert S. Carman, late editor of the Rural New Yorker) have proven popular; but the Carman No. 3 is already rivaling in popularity the Burbank, and is undoubtedly a much better potato. Without any exception whatever it is the **GREATEST YIELDING POTATO** ever introduced, and it may be fairly claimed that it does not yield any small tubers at all. The tubers are borne very close to the plant, a single turn of the fork turning out every potato. It is of large size and of the shapeliest form. Eyes are few and shallow. It is a perfect keeper and is not surpassed as a table variety. Skin and flesh of extreme whiteness. It has no hollow hearts or any dark parts. We recommend this potato to our customers as being unqualifiedly **THE BEST** of all late sorts. **PRICE:** Peck, 50c; $\frac{1}{2}$ bu., 80c; bu., \$1.50; 5 bu., \$1.40 per bu.

There is no other crop in the world that responds to a change, or to new varieties more readily, if so profitably, as a change in your seed potato. There is no other crop that runs out so quickly, except possibly oats, as do potatoes.



Carman No. 3 Potato.

Rural New Yorker No. 2

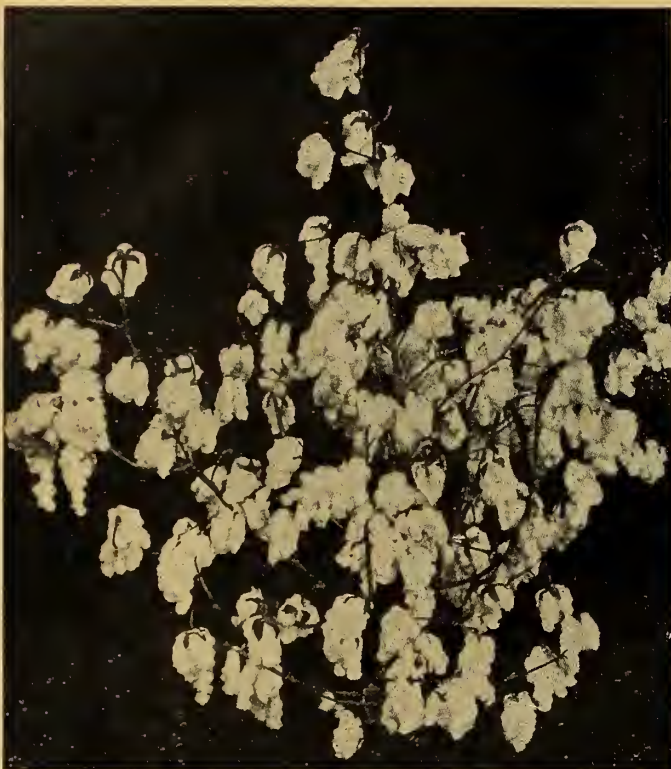
One of the largest yielding varieties in existence. Large and unusually smooth, with few and shallow eyes, skin white, as is also the flesh, which is of superior quality. Medium late and the best drought resister. There is no other potato of more handsome appearance than the Rural New Yorker. Although it is a large yielder it grows but few and small vines. It is very hardy and will stand the heaviest manuring without getting scabby or spotted. **PRICE:** $\frac{1}{4}$ bu., 50c; bu., \$1.50; 5 bu., \$1.40 per bu.

Sir Walter Raleigh

One of Mr. Carman's latest and best introductions—a seedling of the Rural New Yorker No. 2. Sir Walter Raleigh resembles the Rural in shape, but is a little more buff in color. **PRICE:** Peck, 50c; half bushel, 80c; 1 bushel, \$1.50; 5 bushels and over, \$1.40.



Rural New Yorker No. 2.



**A Single Plant of Ratekin's
Mortgage Lifter**

year's end to another. This class had no special call to cut their cotton acreage for they had already done it. The example set by this class is one that should be a lesson to be followed by others all over the South where "Cotton is King" and to grow only enough cotton that the surplus can be sold for cash in hand. Then and not until then will cotton growing become a blessing to those that grow it.

However, a reasonable amount of acreage should and will be planted throughout the cotton growing states, but no farmer or planter can afford to plant old run-out-of-the-gin quality of seed—seed that some time, years ago, came from an improved, high quality and variety, as it is a well known fact that cotton seed, like corn seed and other agricultural farm seeds grown under only ordinary or haphazard conditions, has a wonderful habit of getting "unimproved." To maintain a high grade and quality of any agricultural crop for seed purposes it is necessary that it have the best, most careful and scientific attention and methods of breeding and culture year after year or else it will soon degenerate back to where the improvement began, "unto the fourth generation shall your sins be visited."

We farmers here in Iowa, the great Banner Corn State of the Union, would soon be in the same condition that has overtaken the cotton growing farmer and planter of the southern States, if we grew and depended on nothing but Corn growing alone, without lots of hogs, horses, cattle and other stock to consume it on the farm. Also if we did not give attention to diversified farming, growing Corn, Wheat, Oats, Barley, Rye, Potatoes, Grasses, Clovers, Alfalfa, and other agricultural crops. Is it not time to stop and think? Is it not better to use your head and save your heels?

Every year annual catalogues are sent out all over the South by dealers with their pages decorated and devoted to various varieties of Cotton with claims of having and offering the best. In addition to this Agricultural papers contain columns of advertisements of Cotton Seed, by farmers and growers, all claiming to have a world-beater in the line of yield of lint, etc., etc. They can't all be correct, but we believe a majority of them are honest in stating what they think to be true. The average production of lint is about 190 lbs. per acre, but occasionally in some favored localities and where every condition is most favorable and good seed and varieties are obtained there are a few growers who make 2 to 3 bales per acre as easy as the planter who obtains the average or less than the average, for sure it is if the average is on ly 190 lbs. there must be many who do not produce that much.

OUR COTTON SEED is not grown here. We are located too far north and out of the cotton growing zone, but have our Cotton Seed grown for us by the most practical, reliable, up-to-date Cotton growers of the South, in Texas, Louisiana, Mississippi, Alabama and the Carolinas, and it has been proven by actual experience of planters in the South that the **COTTON SEED** supplied by us has given by far superior and better results than from much of the seed procured elsewhere.

AMONG ALL THAT IS GOOD we have selected the following varieties which have been **TRIED AND TESTED** and **PROVEN THE BEST**; varieties we have handled and sold all over the **COTTON GROWING STATES** for a number of years and can fully recommend them equally as good as represented. Therefore we solicit and will appreciate your orders, large or small, but especially hope to have your order for a part if not all the **COTTON SEED** you require for the coming season's planting, assuring you that you will get the very best to be obtained or that money will buy or procure anywhere.

"Mortgage Lifter" The above illustration of a single plant of this excellent prolific variety shows its correct resemblance, although the picture does not do it justice owing to its dimness from wear. "Mortgage Lifter" is a true—big-bolled, five-lock cotton with an exceptionally long and fine fibre for a short staple cotton. When firmly set in the boll it is easily picked, yet holds up strong and fine in heavy storms. "Mortgage Lifter" makes 37 to 40 per cent lint which, combined with its heavy bearing qualities, makes it one of the most profitable varieties. The plant grows large and strong, with excellent deep root system which makes it a wonderful drought resister. It is said to be the only highly bred up variety of large white seeded, extra big-boll cotton offered for sale. Has the longest of lint and has brought the top prices, often two cents above the general market prices paid for other best varieties. On upland, either rich or poor, you will find "Mortgage Lifter," a splendid variety, one of the very best there is grown. It is adapted to any state or any locality where any other variety is successfully raised.

PRICE: 1 lb., postpaid, 35 cents; 3 pounds, postpaid, \$1.00; peck, by express or freight, not prepaid, 60 cents; bushel (30 pounds), not prepaid, \$2.00; 5 to 10 bushel lots, not prepaid, \$1.75 per bushel. Express rates have been greatly reduced and are now very reasonable and are quite as cheap by small quantities as by freight and go through to destination very much quicker; therefore we advise our customers everywhere in the South to order their seed sent by Express where the weight is under 50 to 75 lbs., and in some cases even up to 100 lbs., but above that freight rates run from one to two-thirds cheapest—lower than express. The freight rate from Shenandoah, to Oklahoma, Arkansas, Texas and Louisiana points run from 75 cents to \$1.25 per hundred pounds, on shipments of 150 lbs. and over. These rates will cover charges to practically any point in either of the states named, also to all other Southern States.

Cotton Seed

Doubling the Yield Per Acre

It Costs No More to Raise a Good Variety of Cotton

It takes the same equipment, the same labor, the same land, to raise a poor crop as it does to raise cotton that produces a higher percentage of lint, and on the market it brings 1c to 2c per pound over the common staples. The Cotton States have been hurt more by the war than any other section of the United States, and the largest cotton field in the world. There will be a smaller acreage planted in 1916. Still there will be lots of cotton planted. You will probably plant at least one-half the usual acreage and in planting you should arrange to plant the best seed that is possible to procure, in order that you can get the largest possible returns from the acreage that you plant. This year above all years you should improve your seed, for if you raise only the common sort that yields small percentage of lint, then of course the quality is poorer on these varieties and brings a less price.

War prices for cotton brought to the attention of the South in general what the Boll Weevil brought to the attention of the Texas and Louisiana planters several years ago, namely: that the one crop plan was a very uncertain proposition, like putting all your eggs under one hen or into one basket and was the sure and certain road that spells **DISASTER** to all who travel it, sooner or later. But Boll Weevil plague proved a blessing in disguise to those benighted people in states and localities visited by this insect and caused them to turn to other agricultural crops. For instance, Louisiana, which never produced to exceed eleven million bushels of corn prior to that time, but imported fifty million bushels each year to feed them, is now producing a hundred million bushels per annum and exporting this product to other Southern states to feed them while they are hanging on to the one crop plan, cotton.

The South cut the cotton acreage in 1915 and their people thereby grew more and larger of agricultural crops than ever before, and had less to buy and more to eat and wear than ever before. The only exception of those who did not cut their cotton crop in 1915 were those farmers and planters who foresaw by past experience the ruin that follows the one crop plan, and had begun to plant and diversify their crops before, and planted a sufficient acreage in food and grain crops to feed their families and stock from one

Are You Growing the Best Cotton Grown or Are You Growing Thief Plants?

From stories that come to us, there are more fakers and frauds advertising a new variety of cotton seed than any other seeds we know anything about. We note that annually, every year, some one comes out with some new cotton that has grown three, four and five bales to the acre, while the actual facts are, the average of the southern states is 190 lbs. per acre. Lots of money is spent and valuable time lost experimenting with these "so-called" new and wonderful varieties. We have taken this same bait ourselves, to a small and very limited extent, in order to give them a try-out, as it is the BEST we are always looking for, for if we can find or get the best there is going, we have an advantage over the fellow who is offering and selling the common kind, "or any old thing that looks like seed." As stated, we have made a try-out on many of these new varieties and find cotton seed grown on very poor sandy land that has been highly fertilized is not adapted to good or rich soil by any means. In our experience and from all reports coming to us from those to whom we sent trial quantities of this seed, have stated, in almost every, if not every instance, that they failed to give satisfaction or results expected. The bolls proved very small, and stalks short and they did not stand the drouth often prevalent in many places in the south which they are nearly always subject to somewhere, if not in many places, etc.

For reasons given, we are only listing tried and tested varieties—varieties that we know will not only give satisfaction but the very best of results, and that you will realize from your own experience that we have told you the truth; therefore, we ask you to buy seed cotton that you can depend upon, that has been tried out by the best cotton growers of the south. Buy from people whom you know to be reliable and responsible and don't throw away your money by buying seed from some fellow or some dealer who jumps up and says he has made a new discovery; the most wonderful of the twentieth century, something that has never been tried out.

Our Tried and Tested Varieties

Brown's No. 1 Cotton Seed Among all that is good we believe there is no variety of cotton grown or in existence that surpasses or equals **Brown's No. 1 Cotton**. We have hundreds of testimonials from responsible cotton growers who unhesitatingly say and recommend, without stint or reservation, Brown's No. 1 Cotton as not only one of the best, but **THE BEST HIGH-CLASSED VARIETY IN EXISTENCE**, superior both in yield and quality to other sorts. This is an extra large boll cotton and yields 42 to 45 per cent and has a record of 50 per cent. It has extra long tap roots, greatly assisting it to resist drouth and in all its history has never shown any sign of rust or wilt; **TWO BALES PER ACRE CAN AND HAS BEEN MADE WITH ORDINARY CULTIVATION AND FERTILIZER**. You have only to **TRY IT** to prove that you have success within your reach. **PRICE:** Peck 75c; bu., \$2.50; 5 to 10 bu. and over, \$2.25 per bu. Seed grown in Georgia by M. L. Brown, originator, one of the foremost cotton seed growers in the South.

Long Staple After handling this splendid variety for the past three years, through all kinds of seasons, wet and dry, we come before our customers and the cotton growers in general, with the confidential assurance that there is no better variety grown anywhere, or that will produce a more certain, sure and profitable crop than this grand variety. It is being grown extensively and very generally along the Red River Valley all the way from the headwaters of that river, Texas and Oklahoma, to its mouth into the Mississippi River in lower Louisiana, and from all our reports, and they are extensive, throughout Arkansas, Oklahoma, Texas, Louisiana, Mississippi, Tennessee, Alabama and Georgia, they everywhere extol it highly as being one of the very best, sure, certain and prolific they have ever tried or tested. The bolls are very long and usually have four to five locks. The lint runs about 1 1/4 inches long, and is of excellent quality. This cotton has sold for 20 to 25c per pound when markets were good or normal. This seed is grown for us in North Texas, by one of the best and most scientific cotton growers of that section, and we have contracted for a specified, limited amount of his most select seed. In order to obtain a supply we would recommend and urge you to order at the earliest period when you can determine on what you want. **PRICE:** 1 lb., 35c postpaid; 3 lbs., \$1.00 postpaid. Peck, not prepaid, 60c; bu. (30 lbs.), \$1.75; 5 to 10 bu., \$1.60 per bu. See Freight, Express and Parcel Post rates on pages 1 and 2, this book.

Texas Triumph This is another Great Cotton. Another we have been handling for the last three years. Another that has achieved great laurels and earnest commendation, by practically every one that has tried or grown crops from our seed of it. It's known as the new 16 to 1, new varieties, but was first introduced some six or seven years ago by a Mr. Mebane of Caldwell County, Texas, and is known in many places where grown as the Mebane Cotton; in other places Mebane Triumph, and plain Triumph, but it makes no difference by which name it is called, just so you get the genuine variety and article which we are listing among the top-notchers, where it has won its way and where it belongs. Among the best at the time of its introduction, it has been carefully rogued and in every way improved upon each and every year, and still maintains its position at the head of the heap. Few cottons will, under the same conditions, make as large a yield of Seed Cotton as the Triumph, and it surpasses every known variety in lint turnout. It produces a strong, thrifty, deep-rooted stalk, with long limbs and short joints. The bolls are large and begin to form near the ground close to the stalk. It is the earliest big boll cotton and stays in well after opening. If planted with the early, small boll cotton, it blooms and fruits at the same time, with the only exception that it takes the large bolls a few days longer to open. When picked free of dirt and water the lint turned out is from 38 to 41 per cent, and in many instances as high as 42 per cent. Last season our grower of this seed reported that his crop averaged a 500 pound bale to every 1,250 pounds of cotton seed throughout the season. As every cotton planter knows, the money in a cotton crop is in the lint. If a pound of lint is worth 12 cents, a pound of seed worth only one-half cent, and you will get 24 times as much for your pound of lint as you will for your pound of seed; yet a pound of seed will exhaust your land eight times as much as a pound of lint, as analysis shows. By adding to your lint per cent you do not lessen the amount of seed you grow per acre, but you increase your yield of lint and your money profit. Cotton at 12 cents per pound, a gain of 1 per cent in lint turnout, is a gain of \$1.80 on a 1,500 pound load of seed cotton in the South. We highly recommend this excellent variety, the boll of which is a handful of cotton in itself. We have secured from our grower, under contract, the finest lot of seed of this variety that we have ever handled and we cannot recommend it too highly for the planter. fancy selected seed: Peck, 75c; bu., \$2.50; 5 bu., \$11.00; 10 bu., \$21.00.

OUR TEXAS TRIUMPH or Mebane Cotton Seed which have been carefully culled are strictly pure. Our growers buy fresh seed each and every year from the originator at \$2.50 per bushel and are the only growers we have knowledge of that do. If you are interested and want the best pure seed of this variety, don't fail to send for some of this select stock. Price postpaid: lb., 25c; 3 lbs., 70c. Not prepaid: Pkt., 80c; 1/2 bu., \$1.50; bu., \$2.25; 5 bu., \$2.10; 10 bu. and over, \$2.00.

SURE CROP COTTON: One of the most remarkable yields of cotton ever reported as being in Alabama, was made from **SURE CROP COTTON**, by Mr. D. C. Case, of Porterdale, Ala., who received a prize premium of \$100.00 on account of growing over eight bales of Cotton on three acres of ground from **SURE CROP COTTON**. Our informant, grower in whom we have implicit confidence, in his word, advises us it is no uncommon thing for this variety to produce two bales and upward on good cotton land, properly prepared and cultivated. Exceptionally big yields of cotton come through extra work, fertilizing, etc., but there is one absolute fact and that is that rightly grown and rightly bred cottonseed will and does produce from 100 to 200 pounds more lint per acre than common cottonseed. Our advice is to cut the acreage and plant only what you can properly cultivate and handle, for you can't afford to wear your life away by planting common or old degenerated sorts and varieties. To come out even or more, in compensation for your time, labor and land, plant the best seed and varieties to be obtained regardless of cost of seed, as this is the smallest item in the production of the crop. Price, postpaid: lb., 30c; 3 lbs., 80c; not prepaid: pk., 65c; 1/2 bu., \$1.25; bu., \$2.00; 5 bu., \$1.90 per bu.; 10 bu. and over, \$1.80.

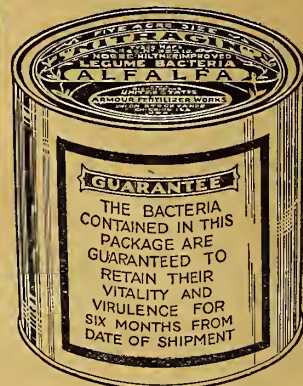
The Improved German Soil Inoculator, Nobbe-Hiltner Process

NITRAGIN

TRADE MARK REG'D DEC. 6, 1898 NO. 32212

PURE CULTURE

THE SIMPLEST SAFEST AND SUREST SYSTEM
OF SOIL INOCULATION FOR ALL LEGUMES



There is a special strain for each legume. In ordering **BE SURE** to name the crop to be inoculated. Clover, Alfalfa, Soy Beans, Cow Peas, Vetch, Field Peas, Field Beans, Garden Peas and Beans, etc., make the best growth when the bacteria or germ that Nature has associated with them are present in the soil. These germs, or bacteria, help these plants to absorb free nitrogen from the air, which they store in nodules or knots on the roots. This nitrogen not only feeds the growing plant but helps the following crop. *This is why*

A Turned-Under Clover Sod Nearly Always Insures Good Corn Crops

Failure with clover, alfalfa, soy beans, cow peas, vetch—in fact, *any* legume, is nearly always due to lack of these necessary germs or bacteria in the soil.

"Nitragin" Pure Culture solves the clover and alfalfa problems; makes legume growing certain and profitable. Each can of "Nitragin" Pure Culture contains *billions* of these necessary germs—in a strong, healthy condition, bred up to the highest possible state of efficiency, packed in ventilated cans—their health and vitality **guaranteed for six months**. "Nitragin" Pure Culture is easy to use. Simply mix with water and spread on the seed. As soon as seed is dry, plant as usual. A boy can do it—it's ten minutes work—"Nitragin" Pure Culture is fool-proof. "Nitragin" Pure Culture insures good catches—uniform, even stands; strong, healthy, deep-rooted sturdy plants that grow quickly and best withstand abnormal seasons and produce better crops—heavier yields of richer feeding value. "Nitragin" Pure Culture means perfect germination. Alfalfa, clover, soy bean, cow peas—in fact, *any* seed legume is too expensive to experiment with. Insure with "Nitragin" Pure Culture. The cost is nominal. Your investment will be returned twenty fold. Dr. Lipman, of New Jersey Experiment Station, tried "Nitragin" Pure Culture; in Bulletin No. 226, he says:

"Alfalfa Yield Increase Due to 'Nitragin' Pure Culture was 500%

"Nitragin" Pure Culture is equally effective on all legumes—its use in an established custom in Germany—the German farmer has made money with "Nitragin" Pure Culture for seventeen years. *Over a million acres were inoculated with "Nitragin" Pure Culture last year.*

Remember—"NITRAGIN" PURE CULTURE Will Do As Well for You

"Nitragin" Pure Culture is guaranteed by **Ratekin's Seed House**, Shenandoah, Iowa, for six months from date of shipment. Order "Nitragin Pure Culture shipped with your seed. A special strain of "Nitragin" Pure Culture is prepared with every legume. When ordering, be sure and give name of crop to be inoculated. It's *easy* to treat your seed with "NITRAGIN" Pure Culture. A boy can do it in ten minutes. You *can't* go wrong if you follow our simple directions.

Price all GARDEN SIZE, weight about 1/2 lb., \$1.00 per can, postpaid
"NITRAGIN" ACRE SIZE, 1 lb. - - - \$2.10 acre can, "
5-ACRE SIZE, 5 lbs. - - - \$9.00 acre can, "

By freight or express—\$2.00 per acre can; 10 acre can lots, \$1.95; 20 acre can lots, \$1.90; 40 acre can lots, \$1.85; 50 acre can lots, \$1.80.

PARCEL POST RATES PAGE 1.



Cow Peas Not Inoculated Cow Peas Inoculated with "NITRAGIN"
(From an actual photograph)

A Campaign for Legume Crops

Alfalfa, Clovers, Cow Pease, Soy Beans, Vetches, Sweet Clover Ect, Etc.,

are the farmers' Gold Mine; greatest money makers; most valuable stock food and greatest Soil Builders. These Legumes produce more wealth than all the Gold and Silver Mines of Colorado, Nevada, California and Alaska combined. But to be absolutely successful, all these seeds and plants require to be inoculated. This we cannot too strongly urge upon our customers and farmer friends, and this is where NITRAGIN comes in.

THE IMPROVED GERMAN SOIL INOCULATOR
NOBBE-HILTNER PROCESS



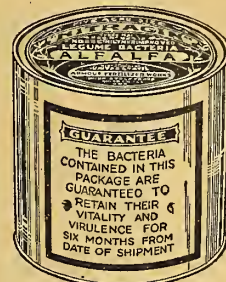
THE SIMPLEST SAFEST AND SUREST SYSTEM
OF SOIL INOCULATION FOR ALL LEGUMES

AWARDED GOLD MEDAL, ST. LOUIS, 1904

"Nitragin" is the trade-mark name for the special germ that acts on the legume root, draws nitrogen from the air and converts it into plant food. As a result there is a uniform "catch"; the crop grows quickly; it is strong, hardy and healthy—deep-rooted—rich in food value. The soil is enriched for succeeding crops.

Nitragin Pure Culture is guaranteed by Armour Fertilizing Works for 6 months from date of preparation, marked on can. A special strain for each legume. In ordering, state crop desired.

Prices per can: Garden size, \$1; acre size, \$2; 5-acre size, \$9, f. o. b. Shenandoah, Iowa. Express extra. Parcel Post, 10c per acre extra.



**A Special Strain
for each Legume
—27 Varieties**

ALFALFA OR LUCERNE

Alfalfa, the Superior of All Plants, for Hay and Pasture. The Giant Agricultural Clover

King of All Crops Yields 2 to 3 tons per acre each cutting, 3 to 4 crops per year. A wonderful

plant that has turned the great west into a paradise of wealth. It grows successfully in every state in this great Union, and is adding millions of wealth every year to the farmers. Produces more valuable feed to the acre than any other forage plant on earth. It has many points of excellence, that commends it to every wide awake farmer. It has great feeding value, containing as much protein as wheat bran. It is a wonderful soil enricher; splendid, valuable feed for hogs. It has 45 per cent more money value than clover and 60 per cent more than timothy.

The United States Department of Agriculture says:

"In addition to the hay and seed crop, Alfalfa adds \$100 to the value of every acre on which it grows." There is no state in the Union in which Alfalfa cannot be successfully grown. Alfalfa produces three to eight tons per acre. It has as much protein as wheat bran. Three hundred stalks have been grown from one seed. It does not exhaust the soil, but enriches it equal to clover. It can be ground into meal and hundreds of carloads are being ground every week by alfalfa mills to feed cattle, hogs, horses and poultry. It will grow three to four crops per year. Alfalfa in money value is worth forty-five per cent more than other clovers and sixty per cent more than timothy. It would hardly be possible to say too much about Alfalfa. It is a working plant which is changing the destiny of many farming sections.

Its long branching roots penetrate far down into the earth, push and crowd this way and that and thus constitute a gigantic subsoiler. These become an immense magazine of fertility to be drawn upon by other crops for many years after.

A Few Hints on Alfalfa The presence of lime in some form, either in the soil or subsoil, is essential. If it is known there is no lime in the soil, lime should be applied as a top dressing, when the land is being plowed preparatory to sowing the seed. **GOOD DRAINAGE IS NECESSARY**, for an excess of surface water soon rots out the roots.

Nebraska Dry Land Grown Alfalfa The great bulk of American seed is grown under irrigation and does not possess that vitality in adjusting itself to normal conditions from seed that it does where grown under natural conditions. We purchase all our seed direct from the growers in Central Nebraska, and know what we are getting; therefore you can rely on the quality of the best quality that can be produced. Seed of this Alfalfa collected in Asia have been so very satisfactory that we have no hesitancy in recommending it as more hardy than the ordinary variety, having stood a temperature of 45 degrees below zero when the ground was bare. Makes large top growth; also fine root growth. Lb., 35c, postpaid; by express or freight at purchaser's expense, lb., 25c; bushel, \$12.60.

Turkestan Alfalfa Prices on Grasses, Clovers, Alfalfa, Vetches, Cow Peas, Soy Beans, Millets, Cane, Kaffir Corn, Sweet Clovers, Crimson Clover, etc., etc., are so fluctuating in value and market prices that it is impossible to accurately foretell or gauge future prices and values on these seeds and items. Therefore it would be well to write for latest quotations before ordering, if time will admit. But to customers at a distance who cannot lose the time, late in the season, required to do this, will say, if prices are lower they will get full value of money sent. Prices at time this catalogue goes to press, December 1st, are the ruling prices now. Our prices, however, will always be in harmony or as low as any other reliable seed house can sell, quality considered.

Read Carefully When you buy your seeds from us you run no risk. If not entirely satisfactory on receipt you may return them at our expense and money paid for them will be refunded.

We only sell one grade or quality of Grasses, Clovers, Alfalfa, etc.—Absolutely and Positively the Best—no two or three brands, such as "Prime," "Choice," "Fair," etc., but the Best that can be grown.

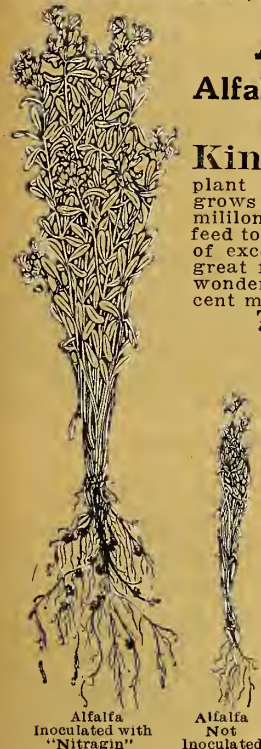
SEED SOLD DIRECT TO FARMERS

Plant for Bountiful Crops and Big Yields You have planned to send and get some good new improved varieties of seeds from which to grow bigger and better crops this year than ever before. Planting season is now close at hand. **"Now is the accepted time."** Don't delay this another day. Sit down after dinner today or tonight and call your wife to your side and make up your list of farm and garden seeds and send it in. Never in the history of the world was there such an opportunity afforded the American farmer as at the present. The European war, while destructive and devastating to the Old World, gives this country the greatest prosperity it has ever known. Corn, 80c to \$1.00; Wheat, \$1.00 to \$1.50; Oats, 60c to 75c per bushel, and other farm products in proportion is what the shrewdest and most penetrating minds are predicting for 1916 food products. Now, brother farmer, is the time to dig old Mother Earth as never before. Now is the time to plant the highest grades and most productive varieties of everything. Our Farm Seeds are all the cream of the most choice to be obtained anywhere at any price. Our Garden and Flower Seeds are absolutely new crop grown, and guaranteed to grow if you give them half a chance.

TERMS:...Cash with order. All goods sold subject to inspection by purchaser. If not satisfactory they may be returned at once and money will be refunded promptly.

BAGS FREE.—Seed is free on board cars at Shenandoah, Iowa, purchaser pays express or freight charges on all heavy seeds. Our big illustrated catalog of Farm and Garden Seeds mailed FREE on request.

Look out for Drought, Hot Winds and Short Crops in 1916. Plant the most Drought Resisting Corn, forage and other quick maturing crops that are most profitable and most marketable, that will furnish the greatest amount of food for man and beast. The United States has now produced two bountiful crops in succession. We cannot reasonably expect another such crop in 1916. "Look out for Drought, Hot Winds and Short Crops in 1916." If we don't get them we will be that much better off.



Alfalfa
Inoculated with
"Nitragin"

Alfalfa
Not
Inoculated



Alfalfa Inoculated with
Nitragin.

How to Grow Alfalfa

Alfalfa can be grown in all parts of the United States, but the growth can be greatly increased by using vigorous nitrogen-fixing bacteria for the inoculation of the seed. It is generally understood that the great value of all legumes, such as Alfalfa, Sweet Clover, Sand Vetch, Cow Peas, etc., as fertilizers are derived from them on account of them being nitrogen gathering plants. This nitrogen is gathered by the plant and stored in the small sacks or nodules produced upon their roots by the nitrogen fixing bacteria. The more nodules on the roots the healthier the plant will be and a much more vigorous growth will result, increasing the production wonderfully as well as increasing the fertility of the soil. Alfalfa without the nodules on the roots cannot be a success, as it is necessary to have them for proper development of the plant and insure the proper growth.

It is true that some soils already contain the bacteria so that inoculation is not always necessary to grow Alfalfa, Sweet Clover or any other legume, but in many cases the bacteria is not sufficient for the best growth and the yield can be greatly increased by inoculation. All the best Alfalfa experts recommend inoculation. Prof. Holden stated, when on the Alfalfa Special Tour, "that he would prefer to sow 10 pounds of seed to the acre that was inoculated, than 20 pounds which was not. Better put part of your money in inoculation than all in seed" You cannot grow Alfalfa without the bacteria, no matter how much seed you put on the ground.

The U. S. Department of Agriculture and the State Agricultural Experiment Station recommend the inoculation of legumes with nitrogen fixing bacteria to induce a prompt "catch" and increase the yield.

Use our Nebraska Dry Land Grown Alfalfa Seed



Ratekin's Iowa Grown Clover Seed.

Alsike Clover

This is one of the hardiest varieties known. It is a perennial and does not winter kill. It will do better on moist land than any other variety of Clover, and is suitable for either hay or pasture. When sown with other grasses it forms a thick undergrowth and greatly increases the yield. It is frequently sown for growing on wet or swampy land. If you have a piece of land that is too damp for Alfalfa, other clovers or grass, sow a mixture of about four pounds Alsike Clover and ten pounds of Red Top Grass Seed. This will make an excellent crop of hay.

Alsike Clover is very hardy, is perpetual, will withstand drought and will not winter kill. About six to ten pounds will sow an acre, and as the seed is very fine it should be covered only slightly. For bottom lands needing drainage but not subject to overflow an excellent mixture is as follows: Four pounds of Red Clover, two pounds of Alsike Clover and ten pounds of Timothy. This quantity is for one acre. **PRICE:** Per lb., 30c; 3 lbs., 90c, postpaid. Ask for ALSIKE CLOVER price per bushel. Per bu., \$12.00. Bags free.

Prof. Beal, the great authority on American grasses, says: "Alsike likes rather moist land, containing some clay. The stems remain green after cutting. It stands dry weather and is not apt to winter kill."

Chas. I. Godell, Barnum: "From the Alsike Clover I cut 2½ tons per acre, being 4 feet tall first cut."

C. A. Guthrie, College Springs, Iowa: "The Alsike (second crop this year) is now 3 feet high."

John Adams, Visalia, Ky.: "The Wisconsin Alsike did splendidly."

Hans Kruse, Chelsea, Wis.: "The Wisconsin Alsike does splendidly. It is 3½ feet tall; good for 4 tons hay."

See illustration on next page.

Inoculated
with
"NITRAGIN"



The Growing of Gold Alfalfa, Inoculated

Medium or Common Red Clover



Iowa Chief Brand Clovers, our Famous Specialties

We sell more clover seed direct to farmers than any seed firm in the West, and it is all sold because those farmers get better quality of seed,—brighter, cleaner, more plump and vital—than they can secure elsewhere. The reason is that we take special care to have everything first class and protect our customers by using the microscope in both buying and selling.

Our clover seed has become widely known for its purity, strong vitality, bardness, vigorous and healthy growth, and stooing qualities, so that now we receive many orders from the most distant parts of the United States. Well posted farmers appreciate the difference between it and ordinary stock. This is the most important of all clovers and the standard everywhere for hay and pasture and our "Iowa Chief" grade is the plumpest, cleanest, purest, fanciest grade; tested and of high vitality. Farmers usually sow 15 pounds of clover seed to the acre when sown alone, but this seed is so choice that 6 or 7 pounds is really sufficient if conditions are favorable, but we recommend sowing 10 pounds so as to be sure of a perfect stand. About 5 pounds, if sown with timothy. **PRICE:** Per pound, 35c; 3 pounds, 90c, postpaid. Ask for price by bushel. Per bu., \$12.00. Bags free.

MAMMOTH RED CLOVER

This is also called Sapling or Pea Vine Clover. It greatly resembles the Medium Red but grows coarser and more vigorous. It is the best clover for pasture as it will produce an enormous yield and is of the highest feeding quality but not as desirable for hay. Specially desirable for bog pasture. You can enrich your soil more cheaply by sowing Mammoth Clover and plowing it under than in any other way. **PRICE:** Per lb., 35c; 3 lbs., 90c, postpaid. Ask for price in quantity. Per bu., \$12.60. Bags free.

It is a perennial and does not winter kill. It will do better on moist land than any other variety of Clover, and is suitable for either hay or pasture. When sown with other grasses it forms a thick undergrowth and greatly increases the yield. It is frequently sown for growing on wet or swampy land. If you have a piece of land that is too damp for Alfalfa, other clovers or grass, sow a mixture of about four pounds Alsike Clover and ten pounds of Red Top Grass Seed. This will make an excellent crop of hay.

Alsike Clover is very hardy, is perpetual, will withstand drought and will not winter kill. About six to ten pounds will sow an acre, and as the seed is very fine it should be covered only slightly. For bottom lands needing drainage but not subject to overflow an excellent mixture is as follows: Four pounds of Red Clover, two pounds of Alsike Clover and ten pounds of Timothy. This quantity is for one acre. **PRICE:** Per lb., 30c; 3 lbs., 90c, postpaid. Ask for ALSIKE CLOVER price per bushel. Per bu., \$12.00. Bags free.

Prof. Beal, the great authority on American grasses, says: "Alsike likes rather moist land, containing some clay. The stems remain green after cutting. It stands dry weather and is not apt to winter kill."

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See illustration on next page.

Alsike and Timothy Mixture

Alsike Clover is the most hardy of all Clovers. It resists the severest cold and also the extreme of drouth and wet. The heads are round, flesh colored, very sweet and fragrant and are much liked by bees. It prefers a moist soil, containing a trifle of clay. It does not heave out of the ground in spring with the frost. It yields abundantly, is excellent for hay and pasture and makes finer and better hay than Red Clover, as the stalks are not so thick and woody. It gives the heaviest yield the third year. The seed is taken from the first crop.

Alsike grown in Iowa for seed, contains Timothy, as the two, Alsike and Timothy, do so splendidly, so magnificently together, blooming and ripening at the same time. If you do not plant to grow for seed only, then the Alsike and Timothy Mixture will give you splendid satisfaction, and is much lower in price.

The seed grows together and mixed when threshed, and on account of seed being so nearly the same size, cannot be separated. It has no standard market value in the general market, so it is considerably cheaper than the two grasses when sold separate. It is a splendid yielder and can be produced for much less than if grown separate. You cannot buy the Alsike and Timothy separate and mix it at anything like as cheap as this combination threshed together. It is the cheapest grass seed you can sow, costing much less than when you buy the seed alone. Farmers, if you are going to seed down some of your land by raising timothy and clover or either alone, try this Alsike and Timothy combination. The Alsike forms a thick bottom and greatly increases the amount of pasture, or hay, and stock prefer it to Timothy alone.

The Timothy acts as protector to the Alsike through the winter and it never winter kills. They are beneficial to each other in growth, as the Alsike supplies the nitrogen to the soil, thus keeping it in proper condition for the best growth of Timothy. The yield is enormous and of the best quality of hay, having the highest feeding value for stock of all kinds and splendid for work horses when pure Clover is objectionable.

I earnestly recommend, and sincerely urge, you to sow this year some of this wonderful mixture on any kind of land. Don't sow Timothy alone, sow the mixture. It is the cheapest seeding, as it will cost less than Timothy and Clover and I know it is better.

PRICE: 1 lb., 25c; 5 lbs., \$1.00, prepaid. By freight or express, not prepaid, 5 lbs., 75c; 10 lbs., \$1.40; peck, \$2.10; bu. (60 lbs.), \$7.75; 100 lbs., \$12.50. Sow 12 to 15 lbs. per acre.



Alsike or Swedish Clover.

White Sweet Clover, Equals Alfalfa

Sweet Clover is an invaluable crop. Nothing superior for fertilizing—equal to Alfalfa in feeding value, excels for pasture purposes, greatest of all honey plants, inoculates land for alfalfa. No plant approaches it when it comes to making money; easy to produce \$100 per acre by growing Sweet Clover. You cannot make money faster than by growing Sweet Clover.

Sweet Clover It is a biennial leguminous plant, tall, somewhat like coarse alfalfa, growing 6 to 8 feet high. Its blossoms, which rarely appear until the second year, are white and give a strong smell of honey, quite perceptible some distance away. If not allowed to reseed, it will die out the second year.

Its value is just becoming known; growers who had experience with sweet clover estimate its value as follows: \$4.00 per acre for honey; \$25.00 per acre for hay and pasture; \$25 per acre for seed. Total, \$54.00. To this should be added its value as soil renovator, which is very much more than 25 wagon loads of stable and barnyard manure.

Soil.—Sweet clover grows in all parts of the United States; it possesses a wider adaptability in regard to soil and climate than any other clover or alfalfa. It thrives on the poorest, sandy soil and on dry hill sides, where no other clover will grow; in the west, where irrigation forced the alkali to the surface with the result that it has killed all vegetation except some saltweeds, sweet clover is the only plant that will grow and make a good yield. It will endure more drought than alfalfa.

AS A PASTURE PLANT.

Sweet Clover is most valuable. It is the first forage plant in Spring that affords green food to animals and the last one that is killed by frost, and in midsummer, it is cheerfully green when all grasses are dry and parched. Its grazing capacity is one beast per acre. It grows very rapidly, and as soon as it is 5 to 6 inches tall, the cattle should be turned on, as tramping the ground suits it, and it should never be allowed to grow very tall or it will get hard and woody; if kept eaten down not too close to the ground the plants will throw out fresh growth on all sides as fast as eaten off, thus furnishing a constant supply of tender growth until frost.

Cattle not accustomed to it do not always eat it readily at first, but soon acquire a taste for it and prefer it then to all other plants; it gives the milk and butter a most delicious flavor and Cattle, although they fill up on it to the highest pitch, never bloat. It is always relished by horses and sheep.

Hogs should not be allowed to pasture on Sweet Clover unless they are well ringed, as there seems to be something about the large roots that hogs are extremely fond of, and they will dig up every one of them and kill the plants.

Bee Pasture.—Sweet Clover blooms the following year after sowing. By the time alsike and white clover and basswood are going out of bloom about July 1st the Sweet Clover comes well into flower, and if not pastured or mowed for hay, it will bloom continually until frost. It yields a big crop of honey, which is of excellent quality, water white.

White Seed or Bokhara Clover makes a splendid hay and can be treated and harvested the same as the ordinary Alfalfa Clover.

As a fertilizer Sweet Clover ranks the highest of leguminous crops. It is a wonderful nitrogen gatherer and greatly enriches all soils, owing to its strong root development.

A Weed Eradicator.—Sweet Clover, when once fairly started, smother out all weeds by its dense growth.

A Forerunner of Alfalfa is Sweet Clover often called, and correctly so, as a crop of it if plowed under in Fall will enrich the soil and inoculate it with bacteria and leave the land in splendid condition for a good crop of alfalfa.

Price of Unhulled Seed: Pkg., 5c; lb., 30c, postpaid. By freight: Lb., 25c; peck, \$3.50; bu., \$13.00; 100 lbs., \$22.00.

Price, Hulled Seed: Pkg., 5c; lb., 35c, postpaid. By freight or express, purchaser's expense: Lb., 30c; peck, \$4.25; bu., \$16.75; 100 lbs. for \$27.50.



SWEET CLOVER

Sweet Clover. Three Times as Valuable as Red Clover.

IF SPACE WOULD PERMIT, we would be glad to print a few of the hundreds of testimonials, letters and endorsements, extolling the value of this wonderful plant, Sweet Clover, both as a pasture and hay producer. Also the greatest soil builder of all our Clovers or leguminous plants, and a money maker from the start. Write us for any further information you want. We have a regular information bureau at the command of our patrons and are always glad to give them any information, we can, that they request.

Ratekin's Wonder Winter Sand Vetch

The Great Soil Reclaimer, Drought Resister and Hay Producer

CULTURE OF SAND VETCH.

Sow in Spring or in Fall at the rate of 40 Pounds Sand Vetches with about $\frac{3}{4}$ bu. of Barley or Oats in Spring and Winter Rye, in Fall. The grain will greatly assist the Vetch in checking the weed growth, as the Vetch starts rather slowly. The grain will also furnish variety if used for pasture and will provide stems on which the Vetch may climb, which will make it easier to cut and harvest the crop. To sow Vetch with a nurse crop has always given the best results. If wanted alone, however, Vetch is sown at the rate of 50 pounds per acre, broadcast, or less amount in drills 30 inches apart. If grown the latter way it can be cultivated while the plants are young but they soon will cover the ground densely.

SAND (or Winter) VETCH, also known under the term Hairy Vetch. Up to a few years ago but little was known of Sand Vetch in the United States and little attention given to it, but since then it has been brought more generally to the notice of farmers both by private parties, as well as our Experiment Stations, and it is being used more and more.

There was no patch more eagerly sought and more carefully noticed by hundreds of farmers who visited our farms than our Sand Vetch. It was worth coming miles to see. It was sown in May, but soon covered the ground and kept on growing and blooming and growing, surprising everybody.

FACTS ABOUT SAND VETCH: It is a wonderful, rapid grower, and thrives with little moisture.

It withstands cold; Sand Vetch is a so-called winter annual, it can be sown quite early in Spring, as soon as the ground can be worked, and also in Fall in August or September, and the next Spring will come forth fresh and green and vigorous and will form green herbage for cattle very early. It furnishes the earliest crop of any forage plants. $\frac{1}{4}$

It is a tremendous yielder, producing all the way from 15 to 20 tons of the very best green forage per acre.

Quality. Vetch makes the best hay imaginable. It is exceedingly nutritious, much more so than clover, is eaten with relish, and may be fed with safety to all kinds of stock.

All agricultural colleges, all writers on agriculture, all practical farmers, recommend the growing of Sand Vetch. It is especially so in Europe. You cannot find an agriculturist there who would not recommend it, and this is the case here in America by those who have given same a trial.

As a fertilizer it has but few equals, as it enriches the soil wonderfully. The Department of Agriculture at Washington estimates the value of a plowed under crop of Vetch as equivalent to putting into the ground \$16 to \$45 worth of commercial fertilizer to the acre.

When intended for hay Sand Vetch should be left standing until the flowers have for the most part given way to the pods, and some of the seeds become well formed.

Pasture all summer. You can have this excellent fodder plant all summer long, from April until November, not only a little but a great abundance, as Sand Vetch produces heavily. As it can be pastured all season until snow covers the ground, severe frosts not injuring this plant like most others, it should be planted in many instances rather than rape. If pastured off when not too far advanced, it will readily grow up again and again.

Soil. As the name would indicate, Sand Vetch has a special adaption for sandy soils; it has a decided capacity to grow on light soil too poor to produce crops of Clovers, Spring Vetches and Cow Peas. But it will, of course, grow more vigorously on a better class of soils.

Seed. Sand Vetch seed is quite high priced, but it pays to plant it, it improves your soil, yields an immense amount of forage per acre and after cutting it once in Spring or pasturing it for some time you can let the field or part of it go to seed. It is a mistaken idea that seed of Sand Vetch can not be grown successfully in the North, as it produces large crops of seed here in Iowa, and our stock has been grown here together with fall rye, from which it can easily be separated, and this Iowa Sand Vetch is far superior to European grown stock handled by other seedsmen, it being purer, of higher vitality and of more vigorous growth.

This Vetch is beyond doubt one of the most valuable fodder plants for the West and Northwestern States, owing to its adaptability to withstand severe drouth, heat and cold. The vines are very similar to Pea Vines, but are more slender and much more thickly clad with leaves and side stems, which furnish nice, succulent feed.

Individual plants will make a ten-foot growth before going to seed. A sowing made in August or September makes excellent fall pasturage for sheep or hogs, the crop in fifty days being two feet high. After close eating it can be left to prevent soil washing during winter and early spring, thus effecting a great saving of soluble mineral fertilizers contained in the soil. It is one of the first plants to start in growth in the spring, covering the ground with a heavy crop early in May. **Price:** 1 lb., postpaid, 35c; 3 lbs., \$1.00. Write for prices in quantities.

Crimson Clover (TRIFOLIUM INCARNATUM OR GIANT INCARNATE.)

This fine Clover is one of the most valuable Fall crops the farmer can put in, as it will make the earliest green feed of any of the Clovers. It will yield under favorable conditions 8 to 10 tons of green feed per acre or $1\frac{1}{2}$ to $2\frac{1}{2}$ tons of hay, and is worth as a fertilizing crop \$20.00 to \$25.00 per acre. It can be cut or turned under in time for other early Spring crops, and in warm climates four or five cuttings are made during the season. Crimson Clover can be sown any time from July to October. The seed we offer is Northern grown, on new land and the best and cleanest that can be produced, showing a strong germination and 95% to 98% purity. Sow 10 to 15 lbs. of seed per acre. **PRICE:** lb., 25c, postpaid. By express or freight, lb., 15c; 10 lbs, \$1.25; 50 lbs., \$5.00; 100 lbs, \$9.50. Bags free.

White or Dutch Clover

White Clover. Very Valuable for Lawns. Perennial, 4 to 9 inches.—This is the common little running clover found in most good pastures. Its chemical analysis shows it to be richer in protein than almost any other legume which we grow for forage. It is, of course, too small to grow for hay, but it is invaluable in all pastures, and no pasture mixture would be complete without it; in fact, we can thoroughly recommend discing old blue grass pastures and sowing a mixture largely composed of this clover to improve both quantity and quality of the pasture. **PRICE:** Lb., 45c, postpaid; 10 lb. lots, 38c a lb., by express, not prepaid.

Bur Clover (Medicago Mac Ulata). Is used mainly in the Southern States and California. It fills in the season when other forage plants have become dried up by the Summer heat. Stock of all kinds feed upon the burs, which contain a large portion of nutritious matter. Sow fifteen to twenty pounds per acre in August, September or October. **PRICE:** Per lb., 25c, postpaid. Prices in quantities, 15c per lb.



WINTER SAND VETCH.



Crimson Clover.

Legumeous Crops Wonderful Fertilizers

ALL LEGUMES ARE WONDERFUL SOIL BUILDERS. Some of them inoculate the crop and prepare it for other following crops, but NITRAGIN makes the crop sure and thus assists beyond a question of doubt the inoculation of the ground for other crops recommended. It is most certainly a wonderful discovery, and you cannot go amiss by using it liberally. Before adopting or recommending it to our customers and trade, we thoroughly tried it out through all experimental stages for which it is recommended, to a finish, and have no hesitation in recommending it to our customers and patrons. Don't fail to try it on any crop for which it is recommended.

READ CAREFULLY: Our Prices are always in line with other Reliable Seed Houses and Dealers. But prices on Grasses, Clovers, Alfalfa, Cane (Sorghum), Kaffir Corn, Cow Pease, Soy Beans and similar seeds, are subject to sharp fluctuations and changes in prices, and it is impossible to accurately foretell future values or make firm prices for any great length of time ahead. Therefore, it would be well to write for latest quotations. We issue a current price list every 15 days, during the months of February, March, April and May. These prices hold good for 15 days from date of issue. But customers at a distance, late in the season, who cannot take the time required to get latest quotations, will say, if prices are lower than given in our catalog, they will get the full benefit and value of their money sent. If higher, we will ship all money sent will pay for. Prices named in catalog are the ruling prices for the higher and better grades of seed at the time this catalog goes to press, December 1st, and will hold good up to and during the month of January, except prices may decline before that time. After that, write for latest prices and quotations, if seeds are wanted in quantities.



Cow Peas have long been grown as a forage crop and soil improver. The result has been that the farmers have been attracted to the crop, and the culture has been greatly extended as varieties have been introduced that ripen anywhere in the North. They will thrive where clover will not grow. They must not be sown till the soil is warm. Where wheat follows the oat crop, peas can be sown after early oats are harvested and will make a growth to turn under for wheat that will immensely improve the crop. The early 70-day sorts are best for this purpose; the running varieties for earlier sowing are best for hay. The crop of hay even on land of only moderate fertility will be more than two tons per acre, and on good land very much more.

New Era The earliest variety of Cow Peas in existence and therefore decidedly the best for growing in Northern States. Throughout the South Cow Peas are considered one of the most profitable crops, as they yield immensely and are largely used as green summer feed, also for planting in corn and other crops and plowing under as a fertilizer. Particularly recommended for planting after grain harvest and plowing under in fall. If you will get the grain off the ground early and plow and plant to New Era Cow Peas you can put the ground in fine shape for next year's crop. You will not have to haul manure on land so treated. Sow in orchards and either use the feed or soiling. Every farmer can use them profitably, as the New Eras mature in sixty days and have done well as far north as Minnesota. Packet, 5c; lb., 30c; 3 lbs., 80c, postpaid. By freight, pk., \$1.25; bu., \$3.75.

Whip-Poor-Will The most highly valued plant in the South for fodder and reclaiming old and worn out land, as it is a leguminous plant of special merit as a fertilizer. The vines when fed green make the best fodder and are very nourishing. The Whip-Poor-Will is the most popular sort, and yields a good crop of both fodder and peas. When ripened ground peas make the best cattle fattener. Packet, 5c; lb., 25c; 3 lbs., 60c. By freight, pk., \$1.10; bu., \$3.50; 2 bu. or more at \$3.25.

Field Peas For Northern States there is no crop of greater value than Field Peas, and none is more neglected, which can only be attributed to a lack of knowledge as to their merits as a fodder, being very rich in the elements that improve the muscle, bone and nervous system. Sow only when the ground can be worked, using two bushels of peas and two bushels of oats per acre. Cut when the oats are in the milk and cure for hay. Especially valuable to the farmer who has not enough meadow land.

White Canada Peas More used than any other. Is one of the very best soiling crops at the North. It is sometimes grown alone, but the most satisfactory dairy results come from sowing it with oats, rye or barley. It makes good ensilage, and is an admirable food either green or dry for cattle, being highly nutritious and rich in milk-producing elements. It is quite hardy and may be sown early in the spring, and will be ready to cut in May or June. The seed should be sown at the rate of one to one and a half bushels per acre. Packet, 10c; pt., 20c; qt., 35c, postpaid. By express or freight, not prepaid, qt., 20c; pk., 85c; bu., \$3.00; 2 bu., \$5.50.

Soy Beans Hard to Equal The berries ripen in 80 to 90 days from the time of planting and produce a crop of 20 to 40 bushels to the acre, and are as easily grown as other beans. When roasted and ground it closely resembles coffee and tastes quite similar. Some mix half and half with coffee when using and claim it is superior. Its great value to the farmer lies in the fact that it makes one of the most valuable crops for feeding stock and adds greatly to the milk production. This variety will ripen in all the Northern States; grows over four feet high, heavily podded with seed and yields ten tons per acre. It is a valuable fodder variety either for feeding green or for the silo. Being a rich, nitrogenous feed, it is unsurpassed as a flesh former, and, like the clovers, is a soil improver. Plant in drills two or three feet apart and one foot between plants. Packet, 5c; lb., 30c; 3 lbs., 75c, postpaid. By freight, pk., \$1.00; bu. (50 lbs.), \$3.50. Mix and plant with corn peck equal parts per acre—makes finest fodder or ensilage there is grown.

The Clay This is so called from the color of the seed, which is the color of reddish yellow clay. The plant is of the same season and habit of growth as the Black, and, like the Black, has ripened as far north as southern Minnesota. Many growers in the South prefer it to the large Black because of the fineness of the growth, which makes it easier to cure. Packet, 10c; pt., 25c; qt., 40c, postpaid. By express or freight, not prepaid, qt., 25c; pk., \$1.00; bu., \$3.50.



Whip-Poor-Will Cow Peas.

Improved Navy or Boston Beans A wonderful improvement over the old-time Navy Bean and superior to the Michigan pea bean. Makes a very desirable farm crop, especially in the far North. Packet, 5c; ½ pt., 12c; qt., 35c, postpaid. By freight, pk., \$1.00; bu., \$3.75; 2 bu. or more at \$3.50.

White Tapary Beans

THE WONDER OF THE TWENTIETH CENTURY. The Bean that stands drought as no other plant does. This Bean comes to us as an ancient agricultural product, drifting down from remote and unknown times and put into the hands of the white man, for cultivation, in the arid and non-irrigated localities. It is a Bean absolutely indifferent to dry weather or irrigation. It was found and discovered at the foothills of the Baboquivard Mountains, in Arizona, by Prof. Clothier, agriculturist, who rode 1300 miles in a wagon through Arizona, seeking to learn what crops were best suited to a dry climate. At these foothills he found more than 4000 Indians, where the rainfall is only 9 inches during the year, and who lived on these Tapary Beans as their main diet the year round. They are not only equal to the White Navy Bean for human food, but a great legume and forage stock food, and under normal rainfall and cultivation have been known to produce, at the Tucson (Arizona) State Experimental Station 2500 lbs. per acre. They mature fully in 60 days, less time than any other known variety. They can be successfully grown anywhere, with or without rain. **PRICE:** Per lb., 25c; 5 lbs., \$1.10, postpaid. Pk., not prepaid, \$2.00; bu., \$8.00. (P. S.—We have tried these Beans here at Shenandoah, on our experimental grounds, and found them to be the best there is grown, for both man and beast.)

THE IMPROVED GERMAN SOIL INOCULATOR
NOBBE-HILTNER PROCESS

NITRAGIN

TRADE MARK REGD DEC. 6, 1898 NO. 32272

PURE CULTURE

THE SIMPLEST SAFEST AND SUREST SYSTEM
OF SOIL INOCULATION FOR ALL LEGUMES

AWARDED GOLD MEDAL, ST. LOUIS, 1904

For each particular crop there is a special strain of "NITRAGIN" Pure Culture. The germs for one variety of legume are not effective on another variety. In ordering be sure to name crop desired. We supply 27 varieties as follows:

- | | | | | |
|-------------------|--------------------|--------------------|------------------|------------------|
| 1. Alfalfa | 5. Alsike Clover | 10. Mammoth Clover | 15. Field Beans | 20. Soy Beans |
| 2. Sweet Clover | 6. Sweet Peas | 11. Field Peas | 16. Garden Beans | 21. Horse Beans |
| 3. Red Clover | 7. Bur Clover | 12. Garden Peas | 17. Lima Beans | 22. Summer Vetch |
| 4. Crimson Clover | 8. White Clover | 13. Canadian Peas | 18. Navy Beans | 23. Winter Vetch |
| (German Clover) | 9. Yellow Clover | 14. Cow Peas | 19. Velvet Beans | (hairy) |
| 24. Blue Lupines | 25. Yellow Lupines | 26. Sainfoin | 27. Serradella | |

Legume is the name given all plants that bear their seeds in pods or capsules. In the Legume family with others, are Alfalfa, Clover, Vetch, Cow Peas, Soy Beans, Garden Peas and Beans. Complete success with these crops is possible only when they are well supplied with nitrogen—most precious and costly of all plant food.

In agricultural Europe the use of "NITRAGIN" Pure Culture is becoming an established farm practice. In Germany it is used on a million acres yearly. American farmers are rapidly awakening to its almost marvelous possibilities.

Bromus Inermis

IT'S THE UNCROWNED KING OF THE DESERT AND DRY, SANDY SOILS.

Of all the grasses that grow or have been ever introduced into this country **BROMUS INERMIS** is the greatest. None has ever proven so valuable and of such great importance. It is a hardy perennial, withstanding the extremes of heat and drouth and of cold better than any other cultivated grass. It has been fully proven that it will not only succeed and grow under about any conditions, but will do well where timothy, clover, orchard grass or alfalfa will wither and die. It will also make the most astonishing yields under such unfavorable conditions. It is a native of Europe and Asia, ranging from France eastward into Siberia. It is thoroughly permanent and grows with wonderful rapidity producing heavy crops and luxuriant pastures. Its value to farmers of dry regions cannot be overestimated. All kinds of stock eat it with relish, and chemical analysis made show it rich in flesh producing ingredients, much more so than timothy. It is very hardy and starts very early in spring, and grows later than any other grass in the fall. There is no grass that will withstand the extreme changes in temperature that **BROMUS INERMIS** will without injury. Grows 24 to 36 inches in height, and can be cut two to three times per year. Should be sown in the fall or early in the spring, using twenty to twenty-five pounds seed per acre if sown alone, or if with alfalfa use twelve pounds with eight pounds alfalfa. Our stock of **BROMUS INERMIS** is new crop grown and has been carefully handled, and can be depended upon to grow vigorously and with good results. May be sown in autumn with winter wheat, or early in spring.

Its nature is to stool out, and thus does not show its best until the second season. It seldom produces seed the first year. Aside from Alfalfa no grass has fulfilled the

A promise to the western farmer better than **Bromus Inermis**. It meets drouth as well as wet and cold, and we know of no grass to equal it. Many of the large ranchers are planting it extensively.

For hog pasture a mixture of **Bromus Inermis** and alfalfa, where the latter succeeds well, is recommended by Prof. Ten Eycke of the Kansas State Agricultural College Experimental Station, and he also suggests for large pastures for cattle a mixture of the following per acre: **Bromus Inermis**, 10 lbs.; Orchard Grass, 8 lbs.; Meadow Fescue, 8 lbs.; Red Clover, 1 or 2 lbs., added to the mixture. For worn out pastures he advises a disc early in the spring, following with a harrow and sow **Bromus Inermis** on the land, putting most on places where native grasses are most killed out. **PRICE:** Postpaid, 1 lb., 25c. By freight at purchaser's expense: 10 lbs. or more, 16c per lb.; 100 lbs., \$15.00. Bags free.

Timothy

There is scarcely a variety of natural or tame grass is so well known that it needs hardly any description. That is so generally cultivated as this. It is suited to moist, rich land, where it grows to perfection and yield under favorable circumstances large crops of hay. If cut in season, which is at flowering time, it makes a most splendid, nutritious hay, while for pasture it cannot be recommended, as almost every farmer knows; its growth is not thrifty, and close pasturing is injurious to it. When sown with red clover or Alsike clover it makes a splendid mixture, and where it is about half and half the timothy yields fully as much as it alone, and you have the clover crop extra. One feeds off the soil and the other the air; the clover greatly enriching the land. For this reason we have added timothy to most all of our clover mixtures, where circumstances will allow.

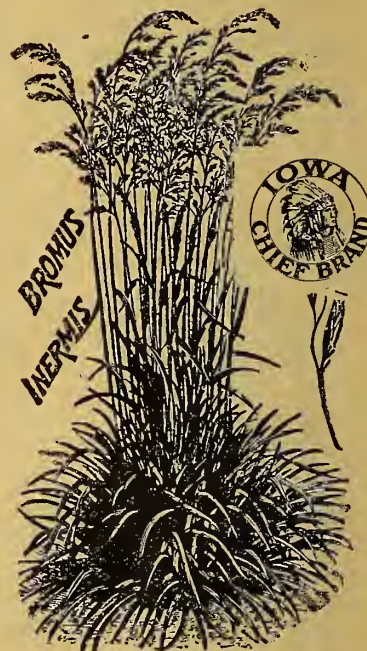
We want to insist and encourage those who anticipate sowing to order their grass seeds early. Market prices are so fluctuating we do not undertake to make firm prices beyond present stocks, which are at present sufficient under ordinary conditions to meet the requirements of our trade. **PRICES:** IOWA CHIEF (highest grade). By mail, postpaid: 1 lb., 30c. By freight or express, purchaser's expense: Pk., \$1.10; bu., \$4.25. Bags included,



Soy Beans
Showing Nodules



Timothy,



Meadow Fescue or English Blue Grass

All points considered, this grass must be regarded as one of the most valuable grasses that can be sown anywhere in this country. Its most important features are that it is drouth resisting, frost resisting and furnishes an abundance of pasturage early in spring and late in fall when other grasses have not come up or have already died out.

It is well suited to a wide range of soils, does well on loamy, clay, and gravelly soils, and thrives on heavy black loam, strong, and low lying soils; in wet places in a pasture when trampled down by the stock where Timothy, Red Clover and Kentucky Blue Grass fail, Meadow Fescue is the only grass that will keep these places productive, and no amount of trampling is able to destroy it. It is not adapted to light sandy soils.

It lives longer than most other kinds of grasses, and although it produces the first year a good crop of hay or pasture, it does not reach the highest stage of growth until two and three years, and for this reason it is best adapted for permanent pastures and meadows. It would not be advisable to sow the seed for a shorter period than three or four years. As a pasture grass it is particularly valuable, as it is the most persistent grower and is one of the very earliest in the spring and the latest in fall. After most other varieties have passed their prime, Meadow Fescue continues to grow and maintain a supply of green herbage which would otherwise be wanting in the pasture. It occasionally grows quite rank, but it always remains tender and succulent and the forage, either green or dried, is very nourishing and much relished by cattle and horses.

Besides hay or pasture it produces also an abundant crop of seed, generally from 500 to 600 pounds per acre, for which there is always a good market at a high price. In many places Meadow Fescue is grown for seed. It is given the preference to Wheat or any other grain on account of its permanency and there are many meadows in this country that have remained productive for 12 to 18 years. The seed can be threshed with an ordinary grain thresher with no changes except the shutting off of most of the wind from the fan. On soils which are too shallow and where the presence of hard-pan prohibits the successful culture of Alfalfa, this grass should be sown in place. Meadow Fescue is also very highly esteemed as a soil renovator.

Meadow Fescue is of the greatest value if sown in connection with other grasses and as soon as farmers realize the value of mixtures of perennial grasses for pastures or meadows, the demand for Meadow Fescue will be greatly increased, mainly because it is so sure to grow and comes up so quickly, keeping the weeds down and furnishing forage while the weaker grasses are getting started. Meadow Fescue matures at the same time as Timothy and Red Top and Alsike Clover and for meadows these varieties are often grown together. Unlike Johnson grass, in the South, it is easily exterminated when you wish to change your land. When plowed up, it's dead for keeps.

Sow 10 to 15 pounds per acre broadcast without nurse crop.

Our seed is American grown, is entirely pure grade, has a vitality of 100%. **PRICE:** Pkg., 5c; lb., 25c; by freight, lb., 15c; bu. (14 lbs.), \$2.10; 50 lbs., \$7.00; 100 lbs., \$13.50.

Orchard Grass A valuable grass for pasture or hay land, and on account of its earliness very valuable for permanent pastures. It furnishes the first green bite in the spring and the last in the fall, and is quick to recover from close cropping, and even thrives better the more it is cropped. Suited to shady places, orchards and groves. Sow 15 lbs. per acre. **PRICE:** Per lb., 40c; 3 lbs., \$1.10, postpaid. By freight: Bu. (14 lbs.), \$2.75; 50 lbs., \$9.50; 100 lbs., \$18.00.



Meadow Fescue, or English Blue Grass. 100 lbs., \$18.00.



Italian Rye Grass

Johnson Grass

It does magnificently in the North, where the cold winter freezing, zero weather kills it annually. Here in Iowa it makes 5 tons of grass per acre, and this all inside of 6 months. In the South it is most vigorous, makes a superior quality of hay and great pasture. Stands drouth and hot weather to greater extent than any grass known or in existence. **PRICE:** Pkg., 5c; 1 lb., postpaid, 25c; 5 lbs., \$1.00. By freight or express, not prepaid, 25 lbs., \$3.25; 100 lbs., \$12.00. Sow 25 lbs. per acre.

Italian Rye Grass It is a wonderfully rapid grower and returns heavy hay crops. Thrives easily. It is particularly adapted for pastures or meadows, where it thrives luxuriantly. Italian Rye Grass is a strong grower, arrives at maturity sooner, has a greater abundance of foliage, grows considerably taller, is more upright, less inclined to spread upon the ground, and upon the whole produces more than the English Rye Grass. Lasts 2 to 3 years.

PRICE: Pkg., 5c; lb., 10c; pk., 40c; bu. of 14 lbs., \$1.25; 100 lbs., \$8.50.

English Rye Grass It is found to flourish on all kinds of soil, and grows on upland situations, though rich and moist soils are the most appropriate. It arrives at perfection and produces, in its first year of growth, a good supply of early herbage, which is much liked by cattle. Cut for hay immediately after blossom. Will last 3 to 4 years.

PRICE: Lb., postpaid, 20c; not postpaid, pk., 30c; bu. of 14 lbs., \$1.15; 100 lbs., \$7.50.

Kentucky Blue Grass



English Rye Grass.



Kentucky Blue Grass.

Fancy Cleaned

Very valuable as a permanent pasture grass. Productive and unusually early in spring, furnishing delicious food for all stock. Unexcelled for lawns. Our seed new crop, Kentucky grown. Sow 14 lbs. per acre for pasture, or 60 to 100 lbs. for lawns. **PRICE:** Pound, 35c; 3 lbs., \$1.00, postpaid. By freight (14 lbs.), \$2.50; 5 bu. or more at \$2.35.

Our "IOWA CHIEF BRAND" KENTUCKY BLUE GRASS.—We pride ourselves on this extra choice grade, which is of such unusual purity and high germination that it is of special value for lawns. **PRICE:** Lb., 25c; 3 lbs., 70c, postpaid. By freight, bu. (14 lbs.), \$1.75.

Prices of Grass and Clover Seeds are subject to change. When ready to order send for copy of our latest Price List showing current prices.



Orchard Grass.



Tall Meadow Oat

Grass Seeds—Continued

Tall Meadow Oat Grass A magnificent grass, of rapid, luxuriant growth, growing on rich soil by June 15th to the height of 4 feet. Better than Timothy in the South. Can be cut three times and does well if sown alone. Tall Oat Grass vegetates with great luxuriance. It is early and productive and affords a plentiful aftermath. It is found most beneficial when retained in a close state of feeding. It makes good hay, is natural to sandy loams, but thrives best on strong, tenacious clays. "It possesses the advantage of early, quick and late growth, tillers well and is admirably calculated for a pasture grass. I measured some on the 20th day of June when in blossom (when it should be cut for hay) and found it 4½ feet long."

RATEKIN'S Superior: Lb., prepaid, 30c; not prepaid, bu., \$2.50; 100 lbs., \$17.50.

Red Top

A hardy, native perennial grass, succeeding best on moist land. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands hot climate admirably. It is the most permanent grass we have. It remains green for the greater part of the year. Sown largely in marshy land and sloughs in the West. In the East it is one of their principal sorts. Fancy cleaned seed. PRICE: Per lb., 35c; 3 lbs., 90c, postpaid. By freight: Per bu. (14 lbs.), \$3.00. Of all other mixtures for swampy, marshy, wet land or land that sometimes overflows, is Red Top and Alsike Clover, mixed 5 lbs. each per acre.

Creeping Bent Grass

(*Agrostis Stolonifera*.) Distinctive on account of its compact, creeping, rooting stems. Of rapid growth and spreading habit, forming a strong, durable turf. Fine for lawns and putting greens, because of its fine texture. If sown alone, use 50 lbs. to the acre. PRICE: Lb., 35c (postpaid, 45c); bu. of 20 lbs., \$6.10; 100 lbs., \$30.00.

Crested Dogtail

(*Cynosurus Cristatus*.) A hardy grass forming a smooth, compact and lasting turf. Does best on rich, moist land, but will grow on most any soil. Roots deeply and withstands dry weather. Does well in the shade. If sown alone, use 30 lbs. to the acre, but the best way is to mix with other grasses. PRICE: Lb., 25c (postpaid, 35c); 10 lbs., \$2.30; 100 lbs., \$21.00.

Tall Meadow Oat

Bermuda Grass or Southern Blue Grass

This is a perennial grass of creeping habit, very valuable for the southern states, as it withstands drought better than any other variety. It has long, creeping stems, which root at the joints and cover the ground with strong matting of the fine turf. This has caused it to be sown largely for the purpose of binding sand and for steep embankments subject to wash. It is a splendid pasture grass, furnishing excellent summer pasture when most other grasses are burned out, and the grazing and trampling of stock does not impair it. It is also much used for lawns in the south, as it stays green all summer. It is of no value for the northern states, as it freezes out farther north than Central Kansas, Missouri and Illinois. It does well on most any kind of soil and thrives on the poorest and sandiest soils. The seed is sown in spring at the rate of 3 to 5 lbs. per acre. PRICE: Pkg., 10c; oz., 15c; ¼ lb., 30c; 1 lb., 85c, postpaid. By express, lb., 75c.

Lawn Seed Grass RATEKIN'S PRIZE WINNER—Beautify the Home Place

A smooth, velvety lawn surrounding a house adds not only to the value, but enhances the enjoyment of every home, whether it be in city, town or country. When properly made, a lawn is the best investment a home owner can make, even good paint. The following suggestions may be of benefit, especially to those who are about to make a new lawn:

The most important thing to consider in selecting seed for a lawn is to obtain a proper mixture of several varieties. By properly choosing early, medium and late grasses a smooth, even, green lawn is assured from early spring to late autumn. A given area can support only so many grass plants of one kind, for they all absorb the same kind of food, but if several varieties are sown the same area will support many more plants, as different sorts live on various elements in the soil. With these facts in mind our **IOWA CHIEF BRAND** Lawn Grass is scientifically mixed and combined. Our experience of many years has given us intimate knowledge of grasses, their habits and requirements. PRICE: By mail, postpaid, lb., 40c; by express or freight at purchaser's expense, lb., 30c; 4 lbs., \$1.10; 10 lbs., \$2.75; 100 lbs., \$25.00. Bags free.



A miniature photographic view illustrating our magnificent Government Post Office Building at Shenandoah. It is located in the near business center of the city, on a triangular square spot of ground, surrounded on either side by broad paved streets. On the opposite and surrounding sides within a stone's throw are located five of the thirteen church buildings of this city. These five churches are all new, costing approximately \$40,000 each, each one of them over \$80,000. The campus grounds surrounding the Government Building is beautifully set in a velvety lawn produced from RATEKIN'S PRIZE WINNER EVERGREEN LAWN GRASS MIXTURE, as are also these church yards. This is the best mixture of lawn grasses to be obtained anywhere.

Permanent Meadow and Pasture Mixtures

Mixed Grasses For meadows and permanent pastures. We are prepared to furnish seeds adapted to all soils, situations and all purposes—for light, medium and heavy soils. By light soils we mean that which is more or less of a sandy or gravelly nature; the heavy, clay and heavy loams, while the medium is an intermediate between these two. A light, wet soil, with respect to grasses suited to it, may be considered same as too heavy soils; a dry, heavy soil more as the light soils. Write us what you want, giving nature of soil, number of acres, etc., and we will, with pleasure, give you estimate and terms.

We ask purchasers to observe that we are able to offer the following mixtures at reasonable figures, only from the fact that we make up large quantities before the commencement of the season, therefore nothing can be taken out. In all these mixtures we are introducing small quantities of Alfalfa Clover with the idea of inoculating the land with the Alfalfa bacillus. Alfalfa revolutionizes farming but the bacillus must be established before the revolution can occur. We cannot afford to add anything to these mixtures on account of the slight margin upon which we have figured. We shall be glad however, to make estimates upon any special mixtures desired by our patrons. Our recommendation for quantity to the acre is fixed on the basis of good fair seeding. The quantity can, of course, be spread over more or less ground as the case may demand. 25 lbs. supplied at the 100 lb. rate.

These are mixtures we can "stand by." We can make up lower priced mixtures if desired. Don't let the price stand in the way of your getting a good article. It is the cheap "fake" grass mixtures that have brought discredit on grass and clover mixtures in this country.

Mixtures for Permanent Meadows

No. 1. For dry and high land. Contains Red Top, Medium Red, Mammoth Red and Alsike Clovers, Alfalfa, Timothy, Orchard Grass, Perennial Rye Grass, Tall Meadow Oat Grass, Meadow Fescue, Hard Fescue, Canada Blue Grass and Slender Wheat Grass. Sow 20 to 30 lbs. to the acre. **PRICE:** Per 100 lbs., \$15.00.

No. 2. For good land neither too wet nor too dry. Contains Orchard Grass, Medium Red and Alsike Clovers, Timothy, Meadow Fescue, Perennial Rye Grass, Hard Fescue, Sheep's Fescue, Alfalfa, Kentucky Blue Grass and Red Top. Sow 20 to 25 lbs. to the acre. **PRICE:** Per 100 lbs., \$14.75.

No. 3. For moist and wet land. Contains Red Top, Timothy, Alsike and Medium Red Clover and Tall Fescue. Sow 20 to 25 lbs. to the acre. **PRICE:** Per 100 lbs., \$20.00.

Mixtures for Permanent Pastures

No. 4. For good, high and dry land. Contains Tall Meadow Oat Grass, Orchard Grass, Hard Fescue, Sheep's Fescue, Timothy, Perennial Rye Grass, Medium Red, Mammoth Red and White Clover, Kentucky Blue Grass, Canadian Blue Grass, Meadow Fescue and Alfalfa. Sow 25 to 35 lbs. per acre. Per 100 lbs., \$16.75.

No. 5. For good land neither too wet nor too dry. Contains Tall Meadow Oat Grass, Orchard Grass, Sheep's Fescue, Timothy, Perennial Rye Grass, Red, Alsike and White Clover, Alfalfa, Kentucky Blue Grass and Red Top. Sow 25 to 35 lbs. per acre. **PRICE:** Per 100 lbs. \$16.00.

No. 6. Especially for prairie conditions. Contains Slender Wheat Grass, Canada Blue Grass, Kentucky Blue Grass, Red, White and Alsike Clover, Alfalfa and Bromus Inermis. 30 to 40 lbs. per acre. **PRICE:** Per 100 lbs., \$18.00.

Combination Grass and Clover Mixture

For Both Hay and Permanent Pasture. It affords enormous crops of hay of the finest quality and highest feeding value, and after same is cut, continuous and abundant pasturage of the richest and most nutritious character until winter sets in. It will stand for years and may be used either for pasturage exclusively or hay and pasturage, as varying conditions may suggest.

We stake our reputation on this mixture, not only as to the purity and germination of the seeds used, but as to the satisfaction it will give to those who purchase.

Contains Mammoth Red, Medium Red, Alsike and White Clover, Alfalfa, Timothy, Kentucky Blue Grass, Meadow Fescue and Perennial Rye Grass.

Owing to the deep rooting and spreading character of many of the varieties employed, fields sown with this mixture will, during periods of drought, look fresh and green while other meadows and pastures are dry and burned. **PRICE:** 100 lbs., \$12.75. Bags free. 25 lbs supplied at the 100 lb. rate.

Quantity—We recommend at least 40 lbs. to the acre.

Brush Pasture Mixture

The modern farmer and stockman does not dig grubs and stumps from brush lands, the expense of muscle and money is too great to warrant the cost. After the wood from such lands has been cut and sold, he seeds the field to tame grasses and clovers, which soon take possession of the soil, when it is pastured with sheep, horses and other stock. During the time of pasturing the roots and stumps will decay and thus the brush lands are made profitable from the beginning at very low cost.

Brush Pasture Mixture contains a variety of seeds such as Blue Grass Red Top, Alsike, Red and Alfalfa Clover, etc., which will thrive on cut-over lands. The introduction of a small quantity of Alfalfa Clover in this mixture is a particularly good feature as it establishes the Alfalfa bacteria in the soil, preparing it as Alfalfa land when it is ready for cropping. Indeed, we are now putting small quantities of Alfalfa in all our Farm Grass Mixtures, with this purpose in view. It is the approved way of establishing the Alfalfa bacillus. This is a valuable and practical addition to our list of mixed grasses. If there is considerable brush on the land cut in July or August. Then sow the seed as freely as seems desirable. It may be mentioned that brush cut at that time rarely grows again. **PRICE:** 100 lbs., \$13.25. Bags free. Lb., postpaid, 25c.

Bottom Land Grass Seed Mixture

Since the advent of country ditches, drainage canals and government projects for the reclaiming of thousands of acres of swamp land throughout our country, there has been a great demand for a grass seed mixture which will thrive on this class of soil. We recommend this mixture with full assurance that it will give satisfaction. Our trials have demonstrated this beyond a doubt. There is no tame grass which will grow in standing water, but on moist bottom lands good results will be obtained. Note the low price. **PRICE:** 100 lbs., \$11.50. Bags free.

Owing to large crops and consequently lower values on some of the varieties of grasses in these mixtures, we are able to make very much lower prices than for several years. At the same time some of these grasses, like Red Top, are scarce and high. We hope this will encourage the seeding of large areas.

GRASS SEED—Continued

Red or Creeping Fescue

A creeping-rooted variety forming a close and durable turf and particularly suited for dry, sandy soils. Resists drought and thrives on very poor soils, gravelly banks and exposed hillsides. Valuable both for shady lawns and for golf courses. 30 lbs. to the acre. **PRICE:** Lb., 25c (postpaid, 35c); 10 lbs., \$2.25; 100 lbs., \$19.50.

Meadow Foxtail

One of the best grasses for permanent pasture, early and of rapid growth. Sow 30 lbs. per acre. **PRICE:** Lb., 30c (postpaid, 40c); 10 lbs., \$2.75; 50 lbs., \$12.75; 100 lbs., \$25.00.

When you send for pure seed and do the mixing act yourself, don't fail to include in your mixture a variety of the hardest, most productive grasses, also drought resisting grasses, such as Bromus Inermis, Meadow Fescue, Rye Grass, Italian Grass, Kentucky Blue Grass, and always mix in some of the clovers, White Dutch Clover, Alsike, Medium Red Clover or White Blossom Sweet Clover is excellent. The Clovers are Legumes and feed the soil, while most grasses exhaust the soil where sown alone without a mixture of some of the clovers. The mixtures should be made up of one-third as much clovers as if it were to be sown separate and alone.

Quick, Early Annual Pasture

If you are going to be short on pasture for your hogs, cattle or sheep, don't fail to sow liberally of RATEKIN'S QUICK ANNUAL HOG PASTURE MIXTURE. This mixture is made up of numerous varieties of the most productive succulent and nutritious plants that will not only furnish you with an abundance of pasture quick and early, but a good pasture all summer long. It requires but 100 lbs. to seed an acre, but it will furnish a hundred dollars' worth of pasture per acre to every farmer who has 20 head of hogs or more. BUT IF YOU HAVE ONLY TEN HOGS, then sow a half acre. It will pay you 100 per cent above the cost of the seed.

Don't fail to sow liberally of forage plants, most drought resisting and quick maturity. They are rescue crops in DRY WEATHER SEASONS and it is wise to LOOK OUT FOR DROUGHT AND HOT WINDS THE COMING SEASON. FOR SURE ANNUAL HAY CROP, SOW LIBERALLY OF BILLION DOLLAR GRASS. Sow 15 to 18 lbs. of seed per acre at close of corn planting time. See page 50 for price and full description.

Fine-Leaved Sheep's Fescue

A very fine-leaved grass. Thrives well on dry and sterile soils. Well suited for lawns. 30 lbs. per acre. **PRICE:** Lb., 25c (postpaid, 35c); 10 lbs., \$2.40; 50 lbs., \$11.50; 100 lbs., \$22.00.

Hard Fescue

A valuable grass for dry lands and sandy soils, very hardy, enduring extremes of heat and cold and long droughts. Splendid for permanent pastures on poor land. Not recommended for lawns on account of its stooling habit. Sow 30 lbs. to the acre. **PRICE:** Lb., 25c (postpaid, 35c); 10 lbs., \$2.00; 100 lbs., \$18.00.

PRICES OF FARM SEEDS ARE SUBJECT TO FLUCTUATIONS OF MARKET PRICES.

RATEKIN'S RELIABLE

Vegetable Seeds

Free Premiums

We allow every customer to select his or her own premium on the basis of 25c WORTH OF SEEDS EXTRA for every dollar remitted for Packets and Ounces. This premium must be selected in packages and ounces only at time order is sent in.

This discount does not apply for seeds in larger quantities and not to collections of vegetables and flower seeds, nor does it apply to plants, bulbs, nursery stock and tools.

If You Are a Market Gardener

Raising garden truck for SALE and your annual purchases of bulk seed amount to \$5.00 or \$10.00 or more, you are entitled to Market Gardeners' prices, and we will quote you these special prices on request if you will make up complete list and send to us. Our seed stocks are especially adapted to the market gardener's use, as they are grown under the most careful supervision from specially selected, pedigreed strains, and are rigorously tested for vitality. Their extremely high quality makes profits certain.

Ratekin's Home Garden Collection No. 1

\$1.50 GETS THIS COMPLETE COLLECTION DELIVERED FREE AT YOUR DOOR.

40 Best Varieties of Vegetable Seeds, Including Nine 1-3 Pint Packages of Beans, Peas and Sweet Corn.

The Biggest and Best Bargain Ever Offered by any Seed House

- | | | |
|---|---|---|
| 1-3 pint Beans, Improved Golden Wax | 1-3 pint Sweet Corn, Peep O' Day | 1 large packet Parsnip, Hollow Crown |
| 1-3 pint Beans, Long Yellow Six Weeks | 1-3 pint Sweet Corn, Evergreen | 1-3 pint Peas, Alaska |
| 1-3 pint Beans, Kentucky Wonder | 1-3 pint Pop Corn, Golden Queen | 1-3 packet Peas, Gradus |
| 1 large packet Beet, Early Eclipse | 1 large packet Egg Plant, Early Round | 1-3 pint Peas, Telephone |
| 1 large packet Beet, Long Blood | Purple | 1 large packet Pepper, Bull Nose |
| 1 large packet Cabbage, Early Jersey | 1 large packet Endive | 1 large packet Pumpkin, Pie |
| Wakefield | 1 large packet Lettuce, Early Curled | 1 large packet Radish, Improved Chartier |
| 1 large packet Cabbage, Ratekin's Autumn King | Simpson | 1 large packet Radish, Improved Chartier |
| 1 large packet Carrot, Danvers Half Long | 1 large packet Lettuce, Grand Rapids | 1 large packet Salsify, Mammoth Sandwich Island |
| 1 large packet Celery, Golden Self Blanching | 1 large packet Muskmelon, Osage | 1 large packet Spinach, Bloomsdale |
| 1 large packet Cucumber, Cool and Crisp | 1 large packet Watermelon, Cole's Early | 1 large packet Tomato, Earliana |
| 1 large packet Cucumber, Chicago Pickling | 1 large packet Watermelon, Kleckley Sweet | 1 large packet Tomato, Matchless |
| | 1 large packet Onion, Red Wethersfield | 1 large packet Turnip, Purple Top Milan |
| | 1 large packet Onion, Yellow Globe | |
| | 1 large packet Parsley | |

This collection is already put up in packages and cannot be changed. Not subject to any premium or discounts offered elsewhere.

Special Collection of Vegetable Seeds

The collections as offered do not admit alteration, because they are put up all ready to ship in advance of the busy season, thus enabling us to offer them at much less than the varieties would cost separately.

- | | | | |
|---|--------------------------------------|--|---|
| Collection No. 2 | 1 packet Wardwell's Wax Bean | 1 packet Cucumber, Arlington White Spine | 1 packet Pepper, Sweet Mountain |
| 36 Packets of Choice Vegetables. A Complete Vegetable Garden for \$1.00 | 1 packet Pole Lima Bean | 1 packet Lettuce, Hanson | 1 packet Pumpkin, Sugar |
| | 1 packet Beet, Half Long Blood | 1 packet Lettuce, Prize Head | 1 packet Radish, Icicle |
| | 1 packet Beet, Eclipse | 1 packet Muskmelon, Rocky Ford | 1 packet Radish, Early Scarlet Globe |
| | 1 packet Cabbage, Early Jersey | 1 packet Muskmelon, Jenny Lind | 1 packet Salsify, or Vegetable Oyster |
| | Wakefield | 1 packet Watermelon, Ice Cream | 1 packet Spinach, Victoria |
| | 1 packet Cabbage, Premium Flat Dutch | 1 packet Watermelon, Dixie | 1 packet Squash, Mammoth Crook-neck |
| | 1 packet Cauliflower | 1 packet Onion, Yellow Globe Danvers | 1 packet Squash, Hubbard |
| | 1 packet Carrot, Danvers | 1 packet Onion, Prize Taker | 1 packet Tomato, Magi Queen |
| | 1 packet Celery, White Plume | 1 packet Parsley, Moss Curled | 1 packet Turnip, Purple Top White Globe |
| | 1 packet Corn, Mammoth White Cory | 1 packet Parsnip, Hollow Crown | 1 packet Turnip, Yellow Globe |
| | 1 packet Corn, White Evergreen | 1 packet Peas, Nott's Excelsior | |
| | 1 packet Cucumber, Emerald | 1 packet Peas, Champion of England | |

Collection No. 3. 17 Packets Choice Vegetable Seed. Postpaid 50c

One Packet Each—Eclipse Beet, Davis Wax Bean, Charleston Cabbage, Danvers Carrot, Giant Pascal Celery, Metropolitan Corn, Early Cluster Cucumber, Denver Market Lettuce, Osage Muskmelon, Fordhook Early Watermelon, Yellow Globe Danvers Onion, Hollow Crown Parsnip, French Breakfast Radish, Dwarf Telephone Pea, Spark's Earliana Tomato, Sibley Squash, White Egg Turnip.

Flower Seed Collections No. 4

From early childhood we have been passionately fond of flowers. The summer days were always spent in our home garden. Great beds of Phlox, Pansies, Verbenas, Portulaca, Sweet Williams, Four-O'clocks, Candytuft, Balsam, etc., were our daily delight. Our boyhood was spent in the garden; indeed, there is no place we feel so completely at home as when surrounded with plants and flowers. We have for years tested every flower obtainable, and our list is full of choice sorts—and we pride ourselves that no flower seeds offered in America have a higher reputation among lovers of beautiful blossoms than our **Choice Northern grown, sure to grow, Flower Seeds.**

SOIL.—Prepare this carefully; have it smooth, fine, mellow and well enriched. It is well to choose a sunny location south of the house; make your seed bed even by means of a smooth board. **Do not sow on wet, cold soil**—have it warm and mellow. Put a little stick at each end of each row, so as to mark it, and pull all the weeds that appear between the rows the first day they can be seen. When plants are large enough, remove same where you want them to remain, and they will reward you with flowers all summer and gladden your heart every time you look at them.

A Magnificent Flower Garden for \$1.00

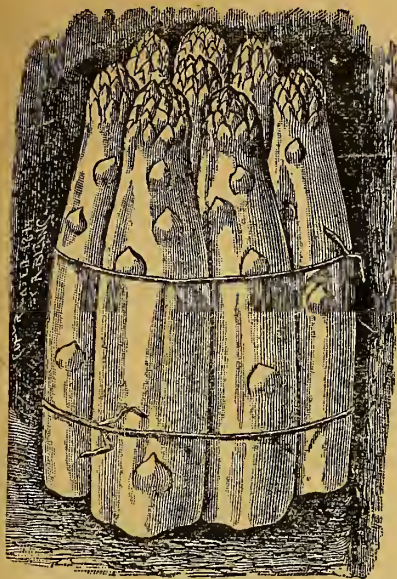
(net), for only \$1.00. This collection contains the cream of all flower seeds and cannot be broken. It's what you will need if you want a great garden of choice flowers.

- | | | | | |
|------------------|---------------------|----------------------|----------------|----------------|
| 1. Abronia | 9. Balsam | 17. Dianthus | 25. Lupinus | 33. Portulacca |
| 2. Anchusa | 10. Celosia | 18. Eschscholtzia | 26. Marigold | 34. Ricinus |
| 3. Ageratum | 11. Calilopsis | 19. Forget-Me-Not | 27. Mignonette | 35. Stock |
| 4. Alyssum | 12. Candytuft | 20. Gaillardia | 28. Nasturtium | 36. Sweet Peas |
| 5. Amaranthus | 13. Canterbury Bell | 21. Gypsophyla | 29. Nigella | 37. Scabiosa |
| 6. Antirrhinum | 14. Chrysanthemum | 22. Helischrysium | 30. Pansy | 38. Verbena |
| 7. Asters, early | 15. Centaurea | 23. Hollyhock Annual | 31. Phlox | 39. Vinca |
| 8. Asters, late | 16. Cosmos | 24. Linum | 32. Poppy | 40. Zinnia |

Above 40 Brilliant Annuals Only \$1.00, Postpaid

charming collection of forty different varieties.

We cannot too strongly set forth the great merits of this

**COLUMBIA MAMMOTH WHITE**

may be had in one year. Asparagus Roots thrive best in soil exceptionally rich and mellow and supplied with a liberal amount of humus. A simple way to start the asparagus bed is to plow furrows 7 inches deep and 3 to 4 feet apart, according to the richness of the soil, then set the plants, which should be at least 1 year old (2-year-old are better), in the trench, allowing 12 to 18 inches between them; spread the roots out well and cover with 2 inches of soil. After cultivation, gradually fill up the trench, eventually burying the crowns of the plants to a depth of 6 inches.

Cultivate shallow and frequently the first season and as soon as the stalks are dead in the fall, remove them and cultivate the entire surface of the bed to a depth of 4 inches, then very early in the spring to a depth of 3 inches, and again the latter part of June, working into the soil at this time a liberal supply of decomposed stable manure.

We send Asparagus Roots by express at purchaser's expense. If wanted by mail, add for postage. By either method they will arrive in first class growing condition. We offer large, strong roots, which produce the most satisfactory results. Roots put up in bunches of 25 each.

Any of the above varieties at the following prices:

ONE-YEAR-OLD ROOTS.

Postpaid: 12 for 25c; 25 for 35c; 50 for 65c; 100 for \$1.15; 500 for \$4.25, postpaid. By express, not prepaid: 12 for 15c; 25 for 25c; 50 for 45c; 100 for 80c; 500 for \$2.50; 1,000 for \$4.00.

TWO-YEAR-OLD ROOTS.

Postpaid: 12 for 35c; 25 for 50c; 100 for \$1.40. By express, not prepaid: 12 for 20c; 25 for 35c; 100 for 85c; 250 for \$1.75; 500 for \$3.00; 1,000 for \$5.50.

THREE-YEAR-OLD ROOTS.

By express: 12 for 35c; 25 for 50c; 100 for \$1.50; 500 for \$6.00; 1,000 for \$10.00.

One-year-old roots can be cut in two years from planting; two-year-old roots can be cut the year following the setting out.

Asparagus

CULTURE: The seed before sowing should be well soaked in water. Sow in drills about 1 inch deep, and the rows about 1 foot apart. Keep the soil mellow and free from weeds during the summer and in the fall or succeeding spring the plants should be set about 1 foot apart and the crown 4 inches below the surface. The beds should be narrow, so as to permit of cutting to the center. Before winter cover the transplanted beds with about 4 inches of manure. The young tops may be cut for the table the second summer, but not very freely until the third.

Columbian Mammoth White

A new and entirely distinct variety that produces shoots which are white and stay white as long as fit for use. It is more robust and vigorous in habit and throws up larger shoots and fully as many of them as Conover's Colossal, and requires no earthing up in order to furnish the white shoots so much sought after. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

Conover's Colossal

A mammoth green sort of the largest size and of good quality. Pkt., 5c; oz., 10c; ¼ lb., 15c; 1 lb., 40c.

Palmetto

Mammoth in size, even and regular in growth and appearance. Usually ready for market before other varieties. Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 50c.

BARR'S MAMMOTH.

A bunch of 25 edible shoots weighed 13 lbs. The shoots are quite often 1 inch in diameter, of a very fine flavor and are very tender and succulent. Pkg., 5c; oz., 10c; ¼ lb., 20c; per lb., 65c.

By far the most satisfactory way to obtain an asparagus bed quick is to set out roots; with large, strong roots such as we supply, a bearing bed

**ASPARAGUS ROOT.**

Artichoke

This vegetable is a great delicacy, highly valued in all parts, also one of the most prominent table vegetables in this country. The scales and bottom of the flower are eaten either boiled or raw, as a salad. The young suckers are sometimes tied together and blanched and served in the same manner as asparagus. The plants thrive best in deep, rich soil, where water will not lodge about them during winter. Plants are set in rows 3 feet apart and 2 to 3 feet apart in the row. The crowns should be covered with coal ashes in the winter to shed the water, and over these a good covering of leaves, held in place by a little earth or litter. When spring arrives remove the leaves, but do not disturb the coal ashes until signs of growth appear, after which the ashes should be spread out over the ground. Seeds may be sown in the hotbed same as the tomato and transplanted in May. It makes a good growth the first year and some flowers may be had in September, but the second year all plants will flower and continue to do so for years.

Large Green Globe The best variety for general use, buds large, scales green; very thick and fleshy. Pkt., 10c; oz., 35c; ¼ lb., \$1.00. For Artichoke Roots, the great Hog Fattener and Corn Saver, see Root Crops, page 55.

Brussels Sprouts

Brussels Sprouts are highly valued in all European countries, but are not generally known here. Thousands and thousands of native born Americans have never tried them and do not know what palatable and nutritious vegetables they are. They should be in every garden. Culture: Same as for early or late cabbage, depending on whether an early or late crop is desired, with the exception that the seed should be sown a few days earlier and when the plants are planted out they should be set 15 inches apart in rows 2 feet apart. 1 oz. will sow 200 feet of drill.

Improved Dwarf The stem which usually grows from 20 inches to 2 feet in height, is covered with "miniature cabbages" which may be boiled like cabbage or cooked in cream like cauliflower. They are by all means the most delicious and delicately flavored of the cabbage family. On this variety the heads grow very closely and its quality is the finest. Pkt., 5c; oz., 15c; ¼ lb., 45c; 1 lb., \$1.50, postpaid.

Dalkeith or Perfection Plants are of dwarf growth and stems are thickly set with large, solid sprouts. This variety is very hardy and even during quite severe weather the plants maintain their sprouts; in fact, the flavor and quality is much improved by frost. Pkt., 5c; oz., 20c; ¼ lb., 55c; 1 lb., \$1.75, postpaid.

Borecole—See Kale

Growth and habit like the cauliflower, except that it is more hardy and the heads are not as compact. Is of special value in the North. Cultivate and use the same as cauliflower. Pkt., 5c; oz., 25c.

Broccoli

The heads resemble those of a coarse cauliflower and are not so fine in quality. The plants, however, are more hardy, require a longer season than cauliflower and give good results in cool, northern localities. They are valuable to succeed the summer and early autumn cauliflowers.

LARGE WHITE.

The most useful variety, easily grown. The plants are quite hardy, if set outdoors early in Spring the crop will be ready the latter part of September; successional sowings could be made for later cuttings. The heads are very large, firm, pure white and unsurpassed in quality. PRICE: Per pkg., 10c; oz., 30c; ¼ lb., 85c; 1 lb., \$2.75.

PURPLE CAPE.

A standard sort, very fine. PRICE: Per pkg., 10c; oz., 30c; per lb., \$2.75.

Ratekin's Bush or Snap Beans—Green Podded

Bush Beans are the type generally grown for early string or snap beans, both for home use and for market. They come in two general classes: the Green-podded and the Yellow or Wax-podded varieties. It is a question which type is the better. Some people like one and some the other. Some markets prefer the wax pods, while others prefer the green pods. It is my personal opinion that there is really very little difference in flavor, yield, earliness, hardiness or quality between the yellow pod and the green pod beans, but still different gardeners and different markets have their preferences, so we must grow both kinds.

NOTE—Each packet of beans will contain 2 oz., sufficient to plant about 20 hills. All beans priced by the packet, ½ pint, pint and quart are delivered postpaid. Persons ordering by express, not prepaid, may deduct 8c per pint or 15c per quart from these prices quoted. Prices by the peck or bushel do not include delivery, but must be sent by express, not prepaid. (One quart will plant 100 feet of drill.)

CULTURE: Beans are somewhat tender, but it often pays to take some risk. Plant in warm, loamy soil at the beginning of settled, warm weather in spring, and at intervals for succession until August. Rows may be made 2 ft. apart, and the beans planted a few inches apart in drills, or 3 to 4 beans in hills 6 to 8 inches apart. Cultivate and hoe frequently, always, however, when the vines are perfectly dry. In hoeing, draw the soil up towards the rows or plants.

Ratekin's Bountiful Bean

A FLAT, GREEN-PODDED BUSH BEAN.

A Prolific and Continuous Bearer. The First in Spring—The Last in Fall. Absolutely Stringless—Very Tender and of Delicious Flavor.

This superior variety was first introduced by us several years ago and our customers have grown it very universally everywhere and it has become exceedingly popular wherever known or grown. It is a distinct variety and improvement in the green Bush Beans and we cannot praise it half high enough. The plant is remarkably handsome and thrifty growth, being practically rust and mildew proof. It is very hardy, extremely early, very prolific and bears continuously longer than any other variety—is the first to produce pods fit to pick in the spring, and the last to yield edible pods in the fall; in fact, frost usually finds midsummer-sown plants still in pod and blossom. **PRICE:** Pkt., 10c; ¼ lb., 30c; 1 lb., 50c, postpaid; 4 lbs., \$1.75, by express or freight, not prepaid.

Special Notice Owing to the unusual weather conditions the past season the bean and pea crop is short, scarce and high. At time this catalog goes to press, December 1st, the bean market and supply is very unsettled; therefore we have not quoted in quantity prices, but earnestly request that you write us for ½ peck, peck, ½ bushel and bushel prices. We have unusually large contract orders out this year for growing, but as yet do not know what per cent of our contracts will be filled. But whatever conditions may be we will be able to take care of our customers and all demands, at prices as low as the lowest.

RATEKIN'S SEED HOUSE.

Ratekin's Stringless Green Pod The stringless Green Pod is now one of the most popular bush beans in America. In point of earliness it ranks among the first, in quality it is excelled by none, and in bearing ability it stands without a rival.

The pods are round, fleshy and nearly straight; are borne in abundance through a long season, beginning early. They are 5 inches in length, rich green in color, very tender and of highest and best flavor. They remain long in edible condition. This bean is unexcelled for home use and will be found very profitable for market. **PRICE:** Packet, 10c; pint, 20c; quart, 40c, postpaid. By express or freight, not prepaid, 4 qts., \$1.00; peck, \$1.75; bu., \$6.50.

Keeney's New Green Pod Refugee or 1,000

to 1 Very popular; enormous yield; similar to the Earliest Improved Valentine, pods one-third larger, tapering to a slender point. Pods are perfectly round and straight, tender and of excellent table qualities; hardy, good for both early and late planting; one of the best for main crop. Very popular with canners. **PRICE:** Pkt., 10c; ½ lb., 25c; 1 lb., 40c, postpaid.

Burpee's Stringless Green Pod

This famous bean, first introduced 20 years ago, is still unequalled! It combines unusual hardiness, extreme earliness, and wonderful productiveness with pods of handsome appearance and finest quality. Early plantings may be made to produce the earliest crop, and with later plantings is the quickest to produce pods, finest in quality, of a rich green very round and straight, 5 inches long, solidly meaty and broad—deeply saddle-backed, pods are always entirely stringless, even when fully matured. In a word, Burpee's Stringless is absolutely unequalled! We could fill pages with testimonials and enthusiastic reports. **PRICE:** Per pkt., 10c; ¼ lb., 15c; lb., 35c, by mail, postpaid. By express or freight, purchaser's expense, lb., 30c; ½ peck, \$1.25; per peck, \$2.25.

LONG YELLOW SIX WEEKS—Very early and prolific; long, green, tender, flat pods; matures quickly. Pkt., 5c; ½ pt., 15c; qt., 45c.

SILVER WAX—A beautiful, new wax bean with pods of peculiar silvery color. A strong grower, vigorous, early and very prolific. Pods are round, very tender, free from rust and diseases and the attractive shape and appearance together with its valuable qualities make it one of the most popular beans on the list. Recommended to all lovers of wax beans. Pkt., 5c; ½ pint, 20c; qt., 60c.



Ratekin's Stringless Green Pod Bush.

Ratekin's Longfellow

Remarkably Early. Exceedingly Prolific

An Extra Early, Round Green-Podded Bush Bean of Fine Quality. Long, Round Green Pods Always Solid, Tender and of Delicious Flavor.

The plants are of robust compact habit, unexcelled in bearing qualities, maturing the crop very regularly. It is extra early, the pods being fit to pick in advance of any other variety of approximate size and merit. (See cut.) PRICE: Packet, 10c; ½ lb., 20c; 1 lb., 40c, postpaid. By express or freight, not prepaid, lb., 30c; 4 lbs., \$1.10.

Improved Earliest Valentine My improved strain of this famous, reliable, green podded bush bean is ready for the basket in 35 days. It has full, meaty, round pods, which possess beauty, tenderness and superior flavor. Plants grow uniformly about 15 inches in height and is the most prolific and profitable bean of its kind. PRICE: Packet, 10c; ½ lb., 20c; 1 lb., 40c, postpaid. By express or freight, not prepaid, lb., 25c.



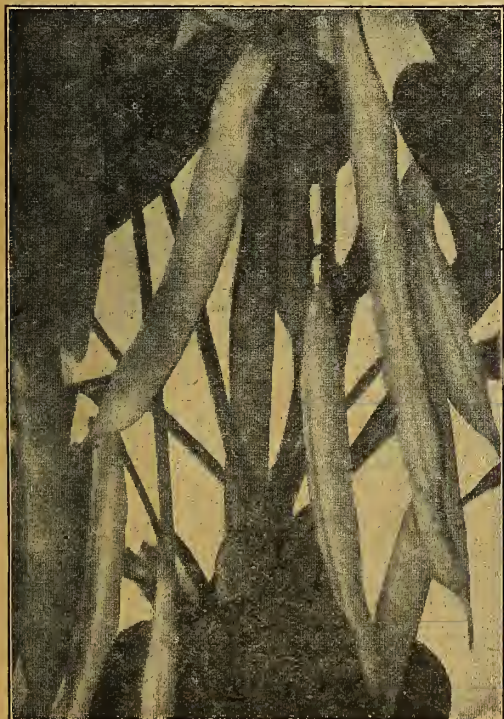
Earliest Improved Valentine.

Ratekin's Kidney Wax

I have realized the importance of a pure white, tender bean for canners' purposes, and in the Ratekin's Kidney Wax I believe I have just what the people have been looking for. The beans being pure white, present the most attractive appearance when cooked. The fresh pods remain tender longer than those of any other variety. It is as heavy a yielder as the Davis White Wax and of a superior quality. The pods are straight, of a bright lemon yellow, brittle, meaty and entirely stringless at all stages of growth. It is the very bean the canners and truckers have been seeking for years, as it combines quantity and quality, which can be used as a string bean until large enough to shell, while the seed, being large and pure white, is most desirable for shell beans, both for summer and winter use. PRICE: Pkt., 5c; pint, 20c; qt., 40c.

Davis White Wax

A very showy variety, and is largely grown for shipping and for the canning factories. The pods are a clear white color, plump, full and entirely rustproof, or as nearly so as any bean may be. This is an excellent variety, but does not retain its tenderness as long as Ratekin's Kidney Wax. PRICE: Packet, 5c; pint, 25c; quart, 45c.



RATEKIN'S Golden Wax.

Improved Golden Wax

In spite of all the new sorts of beans being introduced every year, our Golden Wax Bean still retains its popularity. This is a decided improvement on the old Golden Wax, as it is almost wholly free from rust. The pods are of a dark, rich, golden yellow color and of perfect shape. Cooking quickly as snaps, shelling well when green and of highest quality in either way. PRICE: Pkt., 5c; pt., 25c; qt., 45c.

Dear Sir: Beans are a sort of hobby with me, and I take keen delight in growing improved varieties, both for home use and the market. Last season I tried your Improved Golden Wax with splendid results. The neighbors all envied my garden planted with your seeds, and I wish to thank you for the extras included in the order.

Yours,

C. V. BLACKBURN,
Springfield, Ill.

Improved Black Wax (Dwarf German Prolific.)

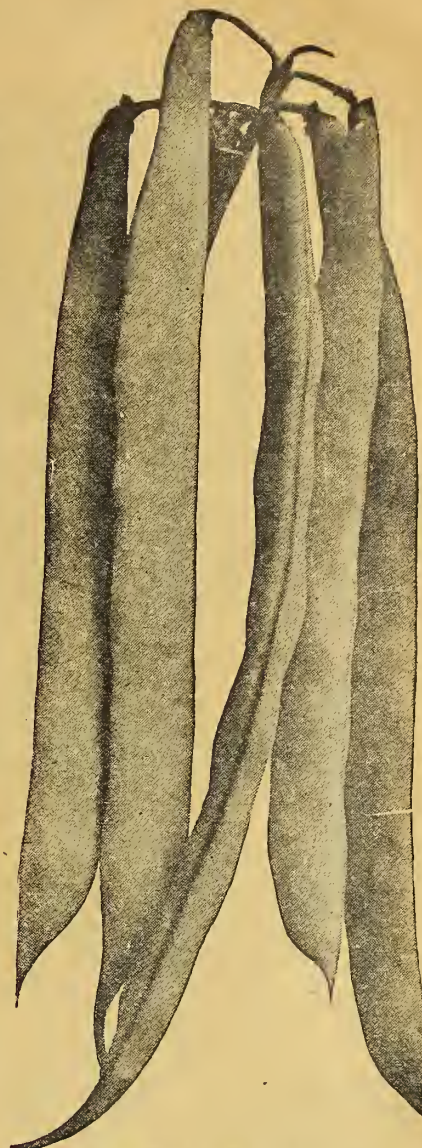
This bean originated from the old Black Wax and is a great improvement over its parent. One of the earliest of all the wax beans and very productive. The pods are from 4 to 5 inches in length, usually slightly curved, quite round, brittle and stringless. PRICE: Pkt., 10c; ½ lb., 20c; lb., 35c, postpaid.

Red Valentine

The pods are very fleshy, round and saddle backed, with only slight strings. Bushes grow uniform, about 15 inches in height, and produce a large crop. It is an old standard and one of the most profitable sorts for private use or market. PRICE: Pkt., 5c; ½ lb., 15c; lb., 30c.

Giant Stringless Bean

A distinct, new cross-bred variety, possessing all the merits of the old favorite Round Pod Valentine, which is one of its parents, and having the following additional merits: The pods average one-third larger; they are absolutely always stringless, round, full and fleshy; it is more prolific; its quality is unsurpassed. PRICE: Pkt., 10c; ½ lb., 25c; lb., 40c.



Ratekin's Longfellow.

BEANS. Dwarf Bush Varieties



Wardwell's Early Kidney Wax.

Mountains, in which lived the Papago and Pima Indians, yielded large, sure and certain crops in that semi-arid region. Also found it was the principal food of these Indian tribes, consisting of from four to six thousand. These beans were taken to Tucson to the agricultural experiment station, in 1908, where they have been grown with great success since that time, but it is only now that we have ever been able to obtain sufficient seed to justify us in cataloguing them; however, have grown them here the past two years in a limited way, in order to test them out, and they have, here as elsewhere, where tried, proven one of the best, most nutritious beans of all previous introductions. They are a white bean, very much resembling the Navy Bean, although not as large in size, but of all the beans and producers they take the cake over all. They are not only one of the finest Navies for table use, but also quite equal to Field Beans and Peas for stock—for hay and forage. They also resist dry weather beyond any comparison with others, and are the quickest to mature; time of maturity being full 30 days ahead of the White Navy Bean. Thus they can be successfully grown if planted in Iowa or Nebraska as late as July 1st to 10th. **PRICE:** Per lb., postpaid, 30c; 3 lbs., 75c.

Wardwell's Kidney Wax Many progressive gardeners will have no other bean. In the South, especially, an enormous acreage is annually planted with great profit to the grower. It is one of the best, earliest and hardiest of the wax sorts. I cannot recommend it too highly to market gardeners as a favorite for shipping. **PRICE:** Pkt., 5c; $\frac{1}{2}$ lb., 20c; lb., 35c, postpaid.

Currie's Rustproof Wax proof. Grown side by side with other wax beans, this variety remained **entirely free from rust**. It is early and productive; the pods are straight, rather flat, 5 inches long, of a light golden yellow color; and very fine flavor and excellent quality; **crisp, tender and entirely stringless**. **PRICE:** Pkt., 10c; $\frac{1}{2}$ lb., 20c; lb., 35c, postpaid.

CHALLENGE BLACK WAX—Earlier, more productive and of better quality than the old Black Wax. Pods tender, round, fleshy and stringless. Pkt., 5c; $\frac{1}{2}$ pt., 15c; qt., 50c.

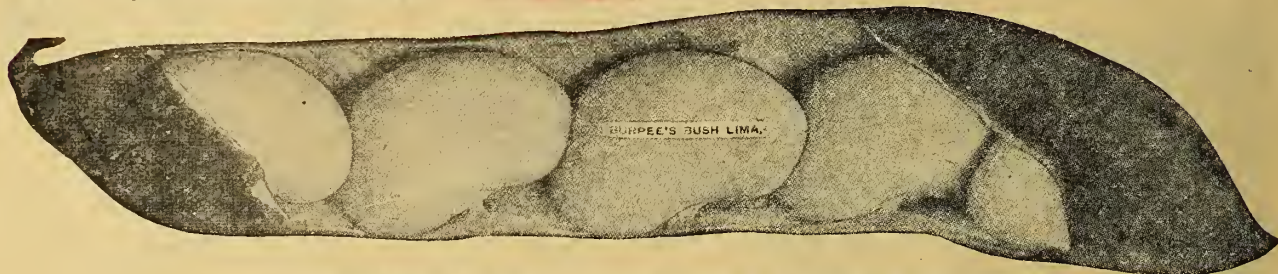
Choice Navy Beans Our stock of this well known variety has been carefully selected and cleaned and will be found far superior to beans commonly offered as "Navy Stock." **PRICE:** Large pkt., 5c, postpaid; $\frac{1}{2}$ lb., 15c; lb., 25c.

Burlingame Medium Field Bean

Earliest, hardiest, most productive and most profitable field bean in America. It averages 40 bu. per acre. It ripens early, and in a wet season remains sound and healthy where other varieties rust and spot. The ripened seed is pearly white, and is much handsomer than other sorts, consequently command top prices. **PRICE:** Pkt., 10c; $\frac{1}{2}$ lb., 20c; lb., 35c, postpaid.

The Great Dry Weather Bean

Tapary Beans This is the bean that was discovered in the arid regions of Arizona, where the rainfall is but 9 inches during the whole year. It was discovered by Robert W. Clothier, agriculturist of the University of Arizona, who traveled 1,300 miles in a wagon, through Arizona, studying the possibilities of Dry Farming and seeking to learn what crops were best suited to the dry climate of the Southwest. Among other things found was the Tapary Bean, at the foothills of the Baboquivara and from them heard of this remarkable bean, one that always covered at the foot of the mountains. Also found it was the principal food of these Indian tribes. These beans were taken to Tucson to the agricultural experiment station, in 1908, where they have been grown with great success since that time, but it is only now that we have ever been able to obtain sufficient seed to justify us in cataloguing them; however, have grown them here the past two years in a limited way, in order to test them out, and they have, here as elsewhere, where tried, proven one of the best, most nutritious beans of all previous introductions. They are a white bean, very much resembling the Navy Bean, although not as large in size, but of all the beans and producers they take the cake over all. They are not only one of the finest Navies for table use, but also quite equal to Field Beans and Peas for stock—for hay and forage. They also resist dry weather beyond any comparison with others, and are the quickest to mature; time of maturity being full 30 days ahead of the White Navy Bean. Thus they can be successfully grown if planted in Iowa or Nebraska as late as July 1st to 10th. **PRICE:** Per lb., postpaid, 30c; 3 lbs., 75c.



BURPEES IMPROVED BUSH LIMA BEANS'

Bush Limas are especially desirable for the home garden, as a good supply of Lima Beans may be produced without the expense of furnishing poles, and the Bush Limas come into bearing two to four weeks earlier than the pole varieties of similar type. The planter should bear in mind that the bean plant is a strong grower, and the soil should be made very rich to enable the plants to produce a good crop of beans. One pint will plant 60 to 75 feet of row, according to distance between plants.

Burpee Improved Lima pods are truly enormous in size—borne abundantly and well filled with handsome beans which are both larger and thicker than those of the popular Burpee's Bush Lima—and fully eight days earlier! It differs from the best strains of Burpee's Bush Lima in having uniformly much larger pods, producing more beans, while both pods and beans are not only larger in size but also considerably thicker. The growth is even more vigorous with heavier foliage. The plants are uniformly upright. Full-grown bushes measure 30 inches in height and 24 inches across the top. The blossom-bearing stalks are thrown well out from the foliage and the pods are borne frequently in what might be called "clusters" of from five to eight. The pods measure 5 to 6 inches long by $1\frac{1}{4}$ inches wide. Even when of full size the enormous beans are of the most luscious flavor; they are thin skinned and truly delicious; they are ready to market eight to ten days earlier. **PRICE:** Per pkt. (2 oz.), 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 35c, postpaid.

Henderson's Bush Lima Bean Magnificent dwarf growing Lima; very early, of a delicious flavor, extremely productive and should be planted in every garden in America. It's early. It's fine. It's just the thing for a family garden. It is wondrously prolific. A package or a pint will furnish sufficient for a good sized family. It is one of those beans that can't be improved upon. **PRICE:** Packet, 10c; lb., 35c.

New Wonder Bush Lima Of more bushy character than other varieties, the pods being borne nearer the stalk. It is very productive and in quality and flavor is unsurpassed. Try this bean. **PRICE:** Pkt., 10c; $\frac{1}{2}$ lb., 15c; 1 lb., 30c.

Gentlemen: I received the large order of seeds, which I sent to you for, including onions, carrots, and other seeds. I sent to you for a pound of your Chantra Carrots, in 1913, and I grew 795 bushels, 54 lbs. to the bushel, and sold them in Buffalo for \$15.00 per ton, and could have sold more, had I had them. Truly yours, G. W. SHEFFER.

Scottsville, N. Y., March 28.

IMPROVED HENDERSON BUSH LIMA BEAN



Dwarf Lima Beans

Henderson's Bush Grows erect to a height of 18 to 20 in. and requires no support. Very early and productive. The beans have the true lima flavor, rich, buttery and tender. These beans are at least two weeks earlier than most pole limas. **PRICE:** Pkt., 10c; ¼ lb., 10c; lb., 35c, not prepaid, 4 lbs., \$1.00; ¼ bu., \$2.00.

Dreer's Bush Lima The pods are short but thick, containing four to five very thick, short beans, closely packed. This variety is later than Burpee's, but the plants are very productive and the beans are easily shelled and of delicious flavor. The vines are not erect, but trail over the ground about three feet. **PRICE:** Pkt., 10c; ½ lb., 25c; lb., 45c, postpaid; not prepaid, 4 lbs., \$1.15; ¼ bu., \$2.50.

Sieva Lima (The Butter Bean of the South.) Grows quickly, matures early and is immensely productive, bearing continually throughout the season. A fine early sort. **PRICE:** Pkt., 5c; pt., 25c; qt., 45c; peck, \$1.75.

Mammoth White Lima

This is the largest of all the Limas. The pods are of enormous size and contain from five to eight beans. Largely grown and highly esteemed. **PRICE:** Pkt., 5c; ½ lb., 20c; 1 lb., 35c.

Pole or Climbing Lima

Ratekin's Giant Podded Lima This, the largest podded and heaviest cropper of all the Limas. It is earlier than King of the Garden and a heavier yielder. A very vigorous grower, the vines attaining a height of 10 to 12 feet, excelling in this respect all other Limas. I have been breeding this type for four years at the trial grounds and offered it in the catalogue for the first time last year. It is the largest podded, the largest seeded and most productive of all Lima Beans. **PRICE:** Pkt., 10c; pt., 35c; qt., 60c; pk., \$2.00.

Lima, King of the Garden This old standard sort is one of the best for main crop. It is vigorous in growth and immensely productive. The vines begin to produce pods near the foot of the pole, and the bearing season continues without interruption until frost. The pods are large, numerous and well filled. The beans are of mammoth size and uniform. **PRICE:** Pkt., 5c; pt., 30c; qt., 50c; pk., \$1.75.

Beans—Pole or Climbing

The Pole or Climbing Beans are more tender, and require more care in culture than the bush varieties. They should be planted about two weeks later, and will succeed best in sandy loam. Each packet of Pole Beans will contain 2 ounces, and will plant 15 to 20 hills. A pint will plant about 100 hills.

Lazy Wife Pole Bean The pods are produced in great abundance and measure from 6 to 8 inches in length; broad, thick, fleshy and entirely stringless. The pods retain their rich, tender and stringless qualities until nearly ripe, and are unsurpassed in all stages. Each pod contains 6 to 8 round, white beans, excellent winter shell beans. This is an excellent bean, sure to give satisfaction. Pkt., 5c; ½ pt., 15c; pt., 25c; qt., 40c.

Old Homestead or Kentucky Wonder

The most popular of all pole beans. Vines are vigorous in growth, the pods are immense, often obtaining a length of 12 inches, borne in large clusters. Bright green, very solid and of excellent flavor, being stringless when young; very early and one of the best for general use. Don't fail to have this bean in your garden. **PRICE:** Pkt., 5c; ½ lb., 20c; lb., 35c; 4 lbs., prepaid, \$1.25.

Dutch Case Knife White seeded. Pods long, green and flat, can be either snapped or shelled when used; good for picking. **PRICE:** Pkt., 5c; ½ lb., 20c; lb., 35c.

Red Speckled Cut-Short or Cornhill

Very popular for planting among corn, and will give a good crop without the use of poles; vines medium, with dark colored, smooth leaves; pod short, cylindrical and tender, bearing beans very close together in the pods. **PRICE:** Pkt., 5c; ½ lb., 20c; 1 lb., 30c; 4 lbs., \$1.10.

Horticultural Pole Bean This is one of the old favorites, and sometimes called the "Bird Eye" Bean; also "Cranberry." The mammoth pods are beautifully striped and splashed with brilliant carmine; very showy and attractive. The beans are large, a rich flavor and fine for shelling. **PRICE:** Pkt., 5c; pt., 20c; qt., 40c.



Table Beets

We have taken great pains to procure the very best beet seed to be had, and a crop grown from our seed will prove it. Our seed is all grown for us by a specialist in Germany, and is absolutely true. These seed form beets uniform in shape and color, small tops and small tap roots, free from fibrous or sprangling roots. The crop is very short this year, consequently prices are higher. Put your order in early. Remember that beet seed must be sown early for table use, as it comes best when the ground is cool. Many fall to get a stand on account of too late sowing and then blame the seed.

CULTURE: The best results are obtained on a deep, sandy loam. For general crop sow as soon as the ground will permit in drills 18 inches part, and thin out 3 inches in the row. For winter use the turnip varieties may be sown in June, and the beets may be kept by storing in a cellar and keeping covered with sand or sandy soil to prevent wilting, or they may be kept outdoors in pits such as are used for apples and potatoes. One or two ounces, or single packets of two or three sorts, will give a good supply for a large family. It is best to sow in freshly prepared soil, which should be pressed firmly over the seed. One ounce sows 50 feet of drill; six pounds for one acre.

Crosby's Egyptian

A distinct improvement on the older forms of Egyptian beet, with a larger and more globular root. It is extremely early, and is smoother and of better color and quality than the original sort. Produces a most desirable beet of a presentable size and shape, very early, making it a favorite with the market gardeners.

PRICE: Pkt., 5c; oz., 10c; 4 oz., 30c; lb., \$1.00.

Early Eclipse Beet

is one of the best known of the table beets, and I have a strain of extra purity and merit, particularly noted for earliness. It is indeed high praise to say that my Eclipse Beet is almost or quite as early as Egyptian, for the latter has been long accepted as the earliest of all; and Eclipse has ever been recognized as superior to Egyptian in table value. My strain has small top and is smooth, fine grained and tender, with bright red color. Many market gardeners have discarded Egyptian entirely in favor of this strain of Eclipse.

Dark Red Egyptian

The Egyptian beet is one of the most popular varieties among market gardeners for forcing purposes. Justly or unjustly it is considered to be the earliest of all. It certainly will bear close planting in the valuable space under glass or in a warm garden in early spring. It is turnip shaped, and when young is crisp and tender. In color it is dark red. To gardeners having a preference for Egyptian, I offer the best strain.

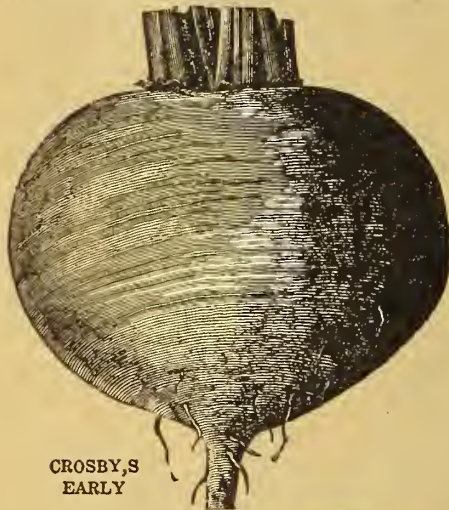
PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Beet cultivation should begin almost before the beets are up and continue until the plants shade the ground. When a few inches high, thin to three to six inches apart in the row.

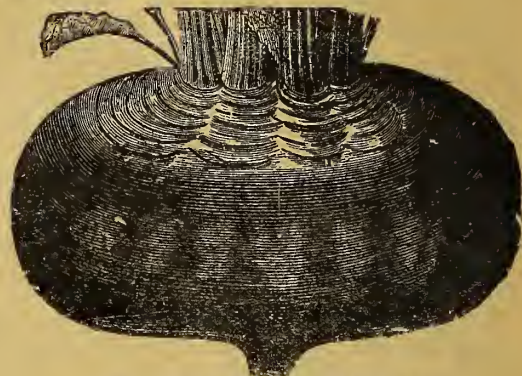
Extra Early Dark Beauty

One of the earliest ever grown. Beautiful oval shape, and the color is a rich dark red. Flesh is fine grain and cooks tender; rich and sweet. Its flavor is superb, free from side roots and smooth, and is very beautiful in market.

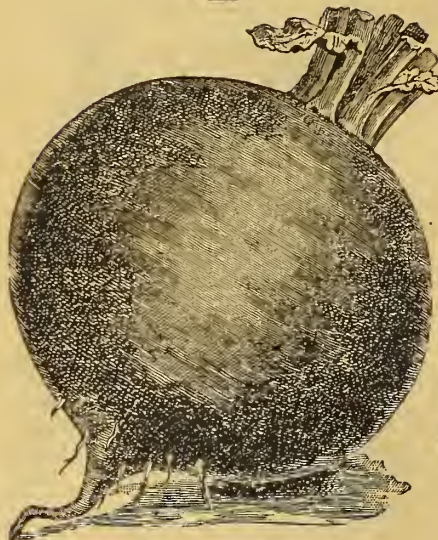
PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 95c.



CROSBY'S
EARLY



Ratekin's Dark Red Egyptian.



Early Eclipse Beet.

Ratekin's Extra Early

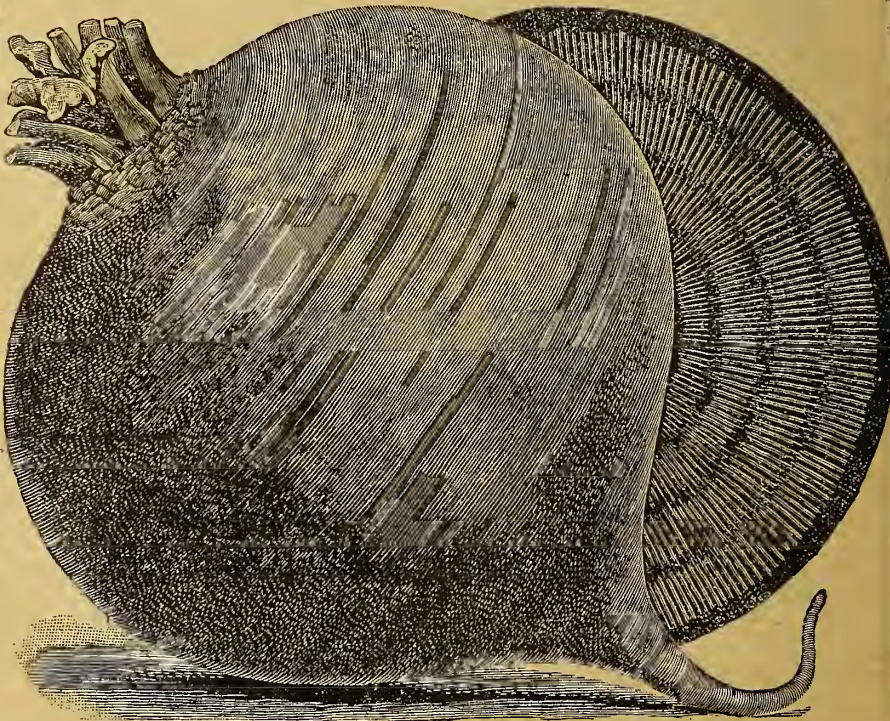
very earliest of all beets. It I consider this variety the is of fine globular form, has sweet, tender flesh of alternate rings of light and dark pink. The light green leaves are sometimes used for greens.

PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Ratekin's Blood Turnip Beet

Ratekin's Blood Turnip Beet is one of the old standbys and still retains its position at the head of all the best table beets there is grown. It is very early, nearly as early as Egyptian and greatly surpasses that variety in flavor. The roots of Ratekin's Blood Turnip Beet are nice large size and grow uniformly perfect, nearly globeshape with a slim tap-root. Leaves are small, colored dark crimson. The color is blood red and quality excellent, flesh being tender, rich deep crimson and fine flavor. Makes a splendid appearance and an excellent seller on the market.

PRICE: Pkt., 6c; oz., 15c; ¼ lb., 40c; lb., \$1.40.



Ratekin's Standard Blood Turnip Beet.

American Grown Cabbage Seed EXTRA EARLY SORTS

Highest Quality We pride ourselves on having the best, purest and highest grade Cabbage Seed that is offered or at least it is surpassed by none. Compared with the cost of seed there is more money in growing cabbage, than in any other crop, and there is nothing that growers should be more particular about than the seed selection. Our seed is all tested for germination and purity, and is of the very best.

SOW ONE OUNCE FOR 3,000 TO 4,000 PLANTS; FOUR OUNCES FOR ONE ACRE



Let Us Help You We want every customer to feel that it is OUR business to help. Whether this help comes in the form of seeds or through culture, or advice given by correspondence—all have the same purpose. Business deals with us must in every case satisfy our customer or we want to know it. "To err is human" and mistakes may happen in spite of all precaution. We consider those, who give us a chance to do the right thing at all times, the true friends of our business.

Henderson's Extra Early Jersey Wakefield Undoubtedly the very finest strain of this well known popular variety in cultivation. The heads are extremely solid, pyramidal in shape, and with very little outside foliage. We grow this strain especially for the most **CRITICAL TRUCK GROWERS AND PLANTERS**. It is a little higher in price than the regular strain, but is well worth every cent of the difference. Pkt., 5c; oz., 20c; ¼ lb., 75c; lb., \$2.00.

Large Jersey Wakefield Heads are very hard, compact, solid and conical in shape. Few outside leaves. We do not admit that our stock has any superior. Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.75. See illustration.

Ratekin's Copenhagen Market A new early variety, very popular with market gardeners. It is the finest large, round-headed, early cabbage in cultivation. It is further desirable on account of the remarkable characteristic of maturing the heads all at the same time, enabling the grower to gather his crop with less expense and permitting the cleaning of the land at the first cutting. The heads average about ten pounds each in weight, are hard and solid with small core. The quality is extra fine and sweet. It matures as early as the Wakefields and will yield more to the acre in weight. The leaves are light green, small, saucer-shaped and tightly folded, making it possible to set them close together in the field. Pkt., 10c; oz., 40c; ¼ lb., \$1.25, postpaid.



Early Winnigstadt.

round, often nearly spherical, but usually somewhat flattened; very solid and of the best quality, keeping as well as the winter sorts. Plants very vigorous and sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10th were still salable September 10th, the only change being increased size and density. One of the very best sorts for general cultivation. **PRICE:** Pkt., 5c; oz., 20c; 2 ozs., 35c; ¼ lb., 50c; lb., \$2.00.

Early Winnigstadt Very early. The leaves are dark green and very tightly folded, making it the hardest of any early cabbage. This variety seems to suffer less from the cabbage worm than most other sorts. Heads are regular, conical and keep well both summer and winter. Our seed has been especially selected. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

Large Charleston Wakefield A selection from Early Jersey Wakefield, only it is about one week later than that popular early variety and grows much larger heads, often averaging 8 to 10 pounds. As solid as Early Winnigstadt. There are immense quantities grown in the South for Northern markets. Pkt., 5c; ½ oz., 15c; oz., 25c; ¼ lb., 60c; lb., \$2.00.

Ratekin's All Head THE EARLIEST OF ALL EARLY LARGE CABBAGE, and considerably larger than any other early summer variety that is equally as early. The deep, flat heads are remarkably solid and the most uniform in color, form and size of any variety. The hard heads grow so free from spreading leaves that fully 1,000 more heads than usual with large cabbage can be obtained to the acre. It is really an all year round cabbage, being equally good for winter. **PRICE:** Pkt., 5c; oz., 15c; ¼ lb., 60c; lb., \$2.00.

All Seasons This is generally grown on Long Island for the market. Heads very large,



Ratekin's All Head.

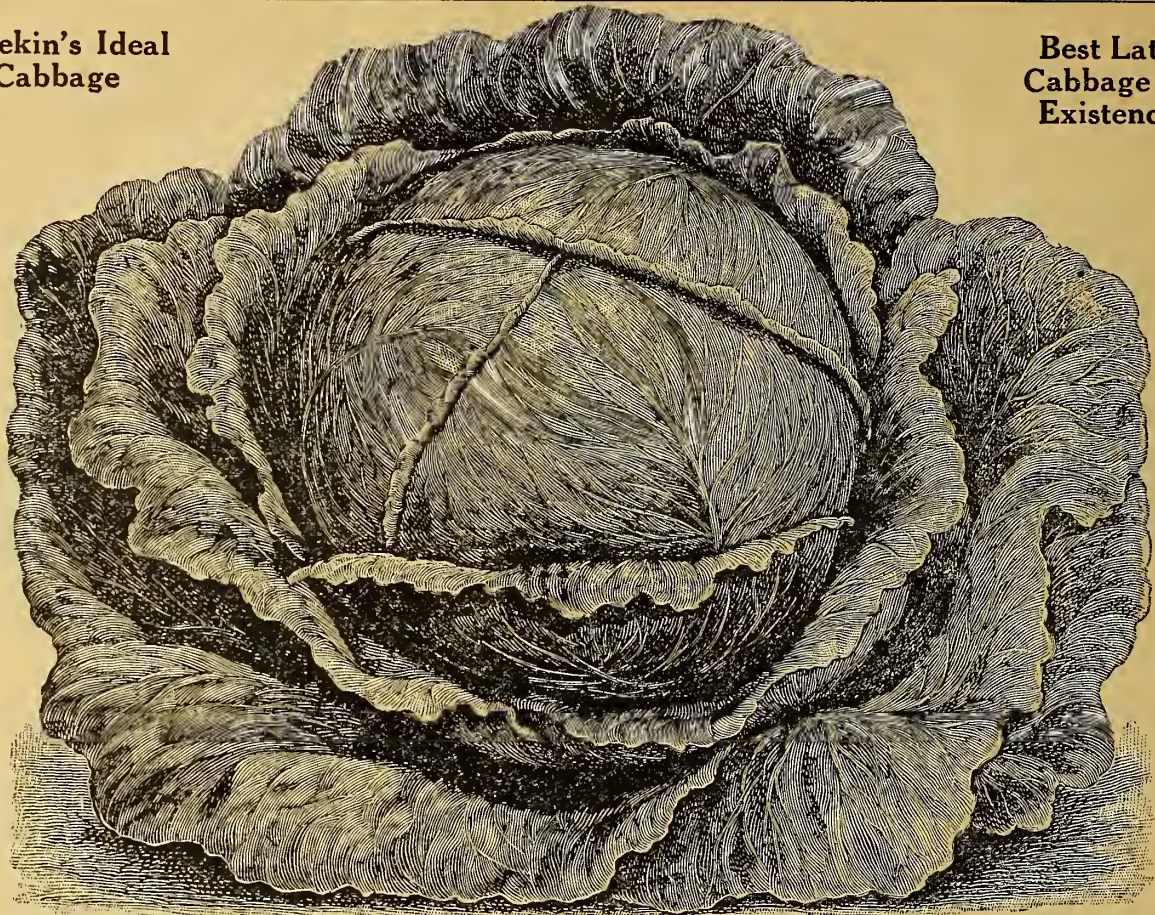
Ratekin's Washington Wakefield Cabbage

(Early.) We introduced this cabbage in 1893, 25 years ago, at which time our stock was limited. We received so many letters of praise and congratulations regarding it, that it seemed as though everyone who tried it must have written to make known their satisfaction. All gardeners are so familiar with the Wakefield Cabbages that description is unnecessary. It is fully as early as any other strain of Wakefield Cabbage and double the size. No other stock equals it in earliness, size of head and purity. **PRICE:** Large pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50. No other cabbage of which we have knowledge has aroused such enthusiasm among cabbage experts as has our Washington Wakefield.

Gentlemen:—This is to thank you for the prompt attention to my order, and for the liberal amount of Free seeds. I very much appreciate your kindness. It is more than I could have asked you for as a premium on my order. I am enclosing you a list of my neighbors' names, and I think if you will send each of them a catalogue, it will bring you some good business. Truly yours, E. S. SPECK, Eldorado Springs, Mo., March 15, 1915.

Ratekin's Ideal Cabbage

Best Late
Cabbage in
Existence



Ratekin's Ideal Cabbage You are no doubt looking for the BEST Late Cabbage there is grown. If so don't look any further. We regard Ratekin's Ideal as the BEST or at least one of the best in existence. Its shape and general aspect are correctly illustrated above. It is a sure heading variety and can be depended upon to head 999 good, solid heads out of every 1,000 plants that have been well started, averaging 16 to 20 lbs. It is unequalled for cooking or slicing and is an exceptionally fine winter keeper. We can fully recommend this Ideal cabbage to our customers everywhere and earnestly hope every cabbage grower will give it a trial. All our cabbage seeds were saved from the most choice selected heads and cannot be beat or equalled in excellency anywhere, at any price. Pkt., 10c; oz., 25c; ¼ lb., 75c; ½ lb., \$1.40; lb., \$2.60.

Autumn King Our Autumn King is a distinct variety and produces enormous, large, solid heads. The outside leaves are small and close up neatly to the cabbage head; thus can be planted closer together than ordinary sorts, which enables them to produce a greater weight to a given amount of land than other varieties—are a splendid winter keeper. Pkt., 5c; oz., 20c; ¼ lb., 50c; per lb., \$1.60.

Flat Dutch Our strain of the Premium Flat Dutch Cabbage cannot be excelled anywhere. Heads average 16 to 20 lbs., measuring 12 to 16 inches in diameter. Specially grown heads often weigh 50 lbs. Without exception, one of the best winter keepers. Pkt., 5c; oz., 20c; ¼ lb., 50c; ½ lb., 90c; per lb., \$1.60.

Ratekin's Mammoth Red Rock

The best variety of late red cabbage. Its sure heading, large size solid as a rock and will please all who want the best red cabbage. Pkt., 5c; oz., 20c; ¼ lb., 60c; ½ lb., \$1.10; lb., \$2.00.

Ratekin's Holland Cabbage

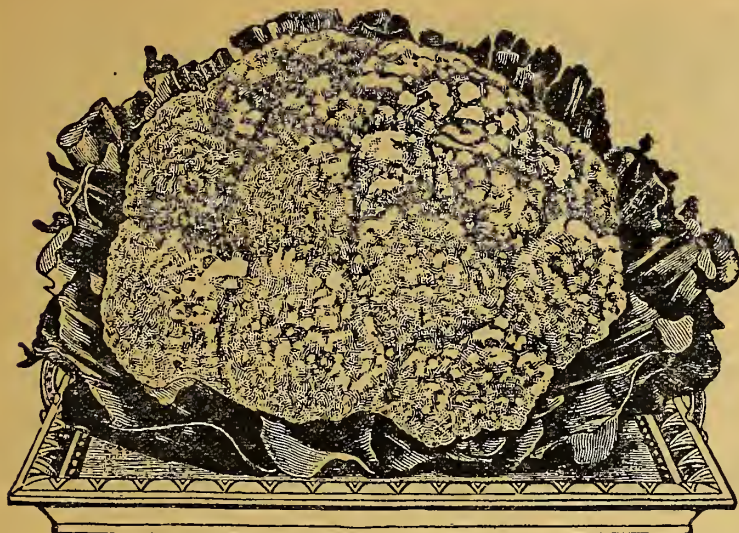
(The genuine stock) This is the most remarkable cabbage yet produced. In fact, it illustrates the truth that "merit will win." While it was introduced only three years ago, it has already become the favorite with those who have the true stock. The heads are very solid and deep, averaging about 8 lbs. in weight; in point of quality they have no superior and keep better than any other sort, the heads being as solid and perfect when taken up in the spring as when put away in the fall. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.



Large Drumhead.

Large Drumhead

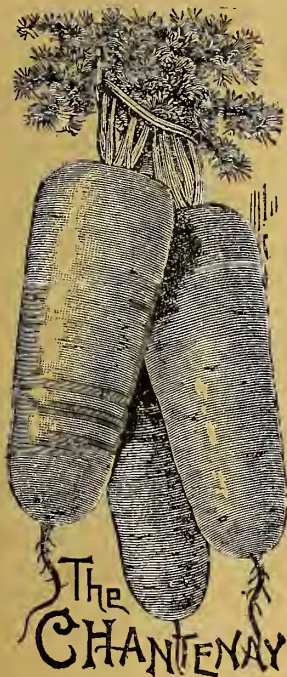
A favorite winter variety. Heads are solid and of good texture and have very few loose leaves, allowing of planting closely in the field. PRICE: Pkt., 5c; oz., 20c; ¼ lb., 50c; ½ lb., 90c; lb., \$1.60.



Ratekin's Early Snowball Cauliflower.

Carrot CULTURE—For the best results the soil should be well worked to a good depth. For early use sow seed in rows 15 inches apart as early in the spring as the soil can be worked, sowing about 4 lbs. of seed per acre and cover the same with one-half inch of soil; but for main crop, sow about corn planting time, using 3 lbs. of seed per acre, and the seed should be covered with nearly an inch of soil. One ounce of seed will sow 100 feet of drill. Make the rows two feet apart to allow for horse cultivation. Keep free from weeds and cultivate occasionally until the roots are large enough for table use, and if grown for commercial purposes they may be cultivated with profit throughout the season. When the plants are 3 inches high thin to 3 inches apart in the row.

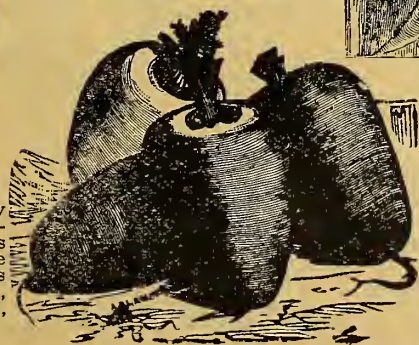
Golden Beauty This is a half long stump rooted Carrot, of a deeper color than Danvers; is a heavy cropper and suitable for both table and stock. This Carrot grows a smooth handsome uniform root; free from core, sweet and tender, never becomes stringy. On account of the immense yielding qualities, this Carrot is desirable for market gardeners or any private garden and with ordinary care it will yield from 30 to 40 tons per acre. We advise our customers to plant liberally of it. Pkt., 5c; oz., 10c; 2 ozs., 20c; ¼ lb., 30c; ½ lb., 55c; lb., \$1.00.



The Chantenay

This variety is a very productive one. It has an extra large shoulder, is easily dug, and is desirable in all respects. It is a stump rooted sort, very smooth, fine in texture and of a beautiful rich, orange color. For table use it is considered by many to be the best of all, both on account of shape and quality. The flesh, when cooked, is very tender. Pkt., 5c; ounce, 10c; ¼ lb., 35c; lb., \$1.10.

Oxheart or Guerande.



Danvers This variety is well adapted to all soils and sections and over 40 tons per acre have been grown and 25 to 30 tons is very common. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 55c; lb., \$1.00.

Ratekin's Cauliflower HEADS WHERE OTHERS FAIL Ratekin's Snowball

One ounce will produce about 3,000 plants. Is superior to all others. It is the earliest of all Cauliflowers. Its close-growing, compact habit enables one-third more to be planted on the same space of ground than can be done with other varieties. For forcing under glass during winter and spring Henderson's Snowball is peculiarly well adapted, from its dwarf growth and short outer leaves, and for this purpose no other Cauliflower is so largely grown. Its dwarf habit and short outer leaves allow it to be planted as close as 18 to 20 inches apart each way, thus making it especially valuable to market gardeners. Our stock is extra choice, and cannot be excelled. It is grown in Denmark, where this variety originated by a grower we believe to be the best in the world. PRICE: Pkt., 10c; ¼ oz., 50c; oz., \$1.75.

Extra Early Dwarf Erfurt

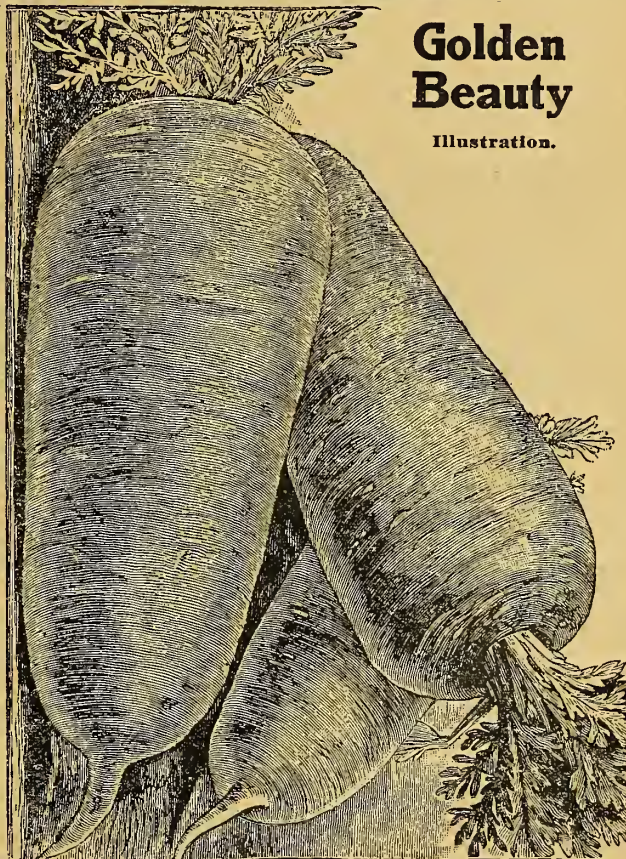
Is valuable for forcing. A very popular variety in Europe and with eastern gardeners. First quality. PRICE: Pkt., 10c; ¼ oz., 50c; oz., \$1.75.

Early Paris Well known small sort which is usually quite satisfactory. Price is so low this year that all can try this excellent vegetable. PRICE: Pkt., 5c; oz., 50c.

Lenormand's A late variety of large size; fine quality. PRICE: Pkt., 10c; oz., 60c.

Golden Beauty

Illustration.



Oxheart or Guerande

This fine and popular carrot is intermediate as to length between the half-long varieties (such as Danvers) and the Scarlet Horn Carrots, but is much thicker than the latter, being at the top from four to five inches in diameter. Flesh bright orange, fine grained and sweet. It is of very fine quality for table use and equally good for stock. Where other sorts require digging, Oxheart can be easily pulled, making it a particularly desirable sort for soils so stiff and hard that other sorts do not grow well. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00, postpaid.

Celery

ONE OUNCE WILL PRODUCE
ABOUT 6,000 PLANTS.

This we consider one of the luxuries of the garden. For first crop sow the seed early in hotbeds, or in boxes in the house, in rich, moist soil, covering the seeds very lightly. For main crop sow seed in open ground in April or as soon as the soil is in good condition. Seed germinates slowly and if weather is hot and dry protect with light covering of hay or straw. Stir soil as soon as plants are well up; thin out and transplant so that they stand about an inch apart in the row. If they grow too rapidly sheer the tops off when about four or five inches high and this will make them more stocky. For main crop set plants out between June 15th and July 15th in rows three feet apart and the plants six inches apart in the row. Care should be exercised to firm the earth well around plants when setting and they will root better. Keep clear of weeds until about the middle of August, when it will be time to begin earthing up. Draw the soil against plants with a hoe as closely as possible, firming it enough to keep plants in an upright position. Late in the season the blanching process must be finished by digging the soil from between the rows and banking it clear to the tops on each side of the row of celery. Much labor is saved by growing the selfblanching varieties, but they do not keep as well for winter use.

Golden Self-Blanching

This is without doubt the most popular celery grown. It is a SELF-BLANCHING sort with little banking or covering. The outer ribs assume a beautiful golden yellow color, while the "heart" or vine stalks are deliciously tender, brittle and sweet. We offer two strains of this variety, viz., RATEKIN'S "PRIVATE STOCK" and "REGULAR" stock, and for the following reason: Some years ago I procured from a celery grower in France some seed of the Golden Self-Blanching variety. That year there happened to be a good deal of trouble in many parts of the country with California grown seed of the Golden Self-Blanching celery; it did not blanch as well as usual, nor was the seed as pure. My customers, of course, noted the difference in the quality between the French stock and the California stock, and have since insisted on having our French grown seed, no matter what the difference in price. In fact, I have on several occasions, when the French stock of seed I mention was very scarce and high in price sold it readily at from \$15.00 to \$25.00 a pound, when I was only asking \$3.00 a pound for the very best California seed.

Ratekin's Private French Stock

PRICE: Large pkt., 15c; oz., 50c; ¼ lb., \$1.75; lb., \$6.00, postpaid.

Regular Stock

PRICE: Pkt., 10c; oz., 25c; ¼ lb., 80c; lb., \$3.00, postpaid.

Broccoli

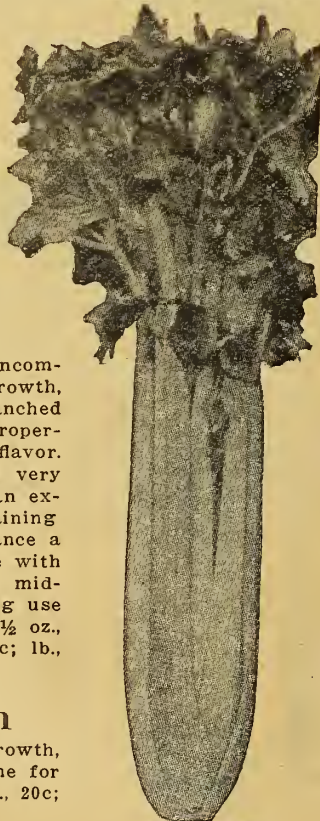
(One ounce will produce about 3,000 plants.) Growth and habit like the cauliflower, except that it is more hardy, and the heads are not as compact. Not desirable for warm or dry countries, but of special value in the north. Cultivate and use the same as Cauliflower. Pkt., 5c; oz., 35c.

Brussels Sprouts

(One ounce will produce about 3,000 plants.) Of the cabbage family, producing numerous heads on the stem, of most delicious quality, as well as the cabbage-like head at the top. Use and cultivate the same as winter cabbage. Pkt., 5c; oz., 15c; ¼ lb., 45c.

White Plume

Stalks, inner leaves and heart white and fit for use by simply tying up closely with soft twine. More used than any other variety by market gardeners. Our seed is of the highest quality and sure to please all. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.



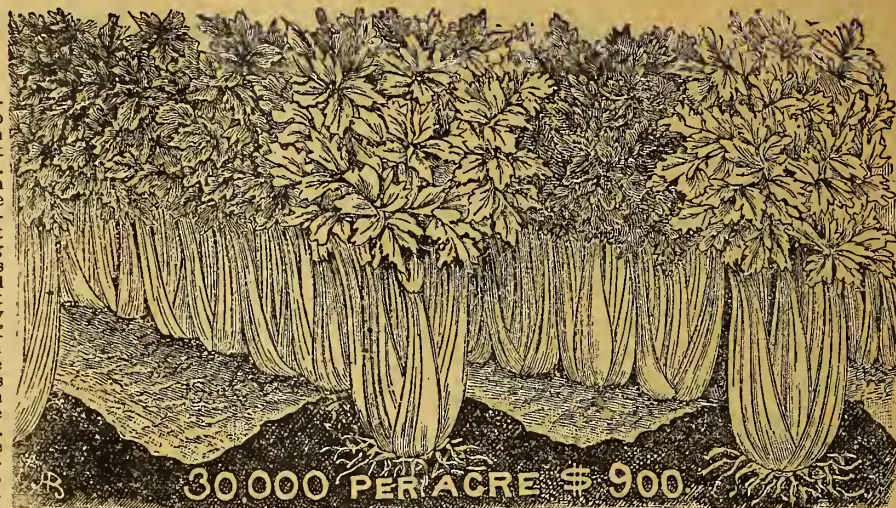
White Plume.

Giant Pascal

Solid, crisp stalks of incomparable flavor. Strong growth, producing perfectly blanched stalks when hilled up properly. Of rich, nutty flavor. Blanches easily and is very brittle. A fine keeper, an excellent shipper, retaining color and fresh appearance a long time. A favorite with Southern growers. For mid-Winter and early Spring use it is excellent. Pkt., 5c; ½ oz., 15c; oz., 25c; ¼ lb., 75c; lb., \$2.25.

Winter Queen

Of short, stocky growth, broad heavy stalks. Fine for Winter use. Pkt., 5c; oz., 20c; ¼ lb., 55c; lb., \$1.75.



Golden Self-Blanching.—By far the most popular sort.

Chicory

Used as a substitute for coffee. Cultivate the same as carrots. Take up roots in the fall, cut in small pieces and let dry. When wanted for use it is roasted and ground like coffee. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Chervil

(An ounce will sow 100 feet of drill.) Leaves used in soups and salads. They have a pleasant aromatic taste which is greatly liked. Cultivated like parsley. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Collards

(One ounce will produce about 3,000 plants.) Collards are largely used as "greens" in some parts of the country, especially south. They are a form of loose-headed cabbage.

Georgia

The most satisfactory for general use. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Corn Salads

Broad-Leaved, Large-Seeded—A delicious salad used during the winter and spring as a substitute for lettuce, and also cooked and used like spinach. It will mature in six weeks. Sow in early spring in drills a foot apart, or for winter use sow in September and winter over like spinach. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c, postpaid; by express 5 lbs. or more 50c per lb. One ounce will sow 18 square feet, and 6 pounds will sow an acre.

Cress or Pepper Grass

Early Curled

Well-known salad. Sow at intervals all season. Pkt., 5c; oz., 10c; ¼ lb., 25c.

True Water

Sow seed along the border of running water. Pkt., 10c; oz., 35c.

Upland Cress

A perennial variety; hardy, produces well; same flavor as Water Cress. Grown on high, dry land; does not run to seed rapidly. Pkt., 10c; oz., 25c.

EVERY GARDEN SHOULD CONTAIN EVERY ONE
OF THE ABOVE VEGETABLES FOR THE TABLE.



Perfect White Spine.

Cucumbers

(One ounce will plant 50 hills, two pounds one acre.)

Cucumbers succeed best in a rich, loamy soil. For first early, sow in hotbeds, in berry boxes or in small flower pots, six weeks before they can be set out in open ground. When danger of frost is over transplant in hills four feet apart each way. For general crop plant in open ground in May, about twelve seeds in a hill. When danger of bugs is past thin to four strong plants in a hill. For picking, plant in June.

White Spine Cucumber

EXTRA EARLY PROLIFIC—THE FINEST FOR SLICING

Perfect White Spine Cucumber perfection has been attained in this grand improvement in the White Spine family. It is an early, prolific and continuous producer of uniformly large and symmetrical fruits of an intensely rich, deep green color, faintly marked with light yellowish shading toward the tip. It runs very close to type, bearing practically no misshapen fruit or culls. It is the ideal for slicing—flesh being compact, fine-grained, sparkling white and of most refreshing and delightful flavor. The vines are vigorous, quite healthy, mildew-proof, maintaining their luxuriance and bearing from the earliest to the latest season. Either for the home garden or for market this variety is without a peer. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

Ratekin's Early Prolific Bears the Whole Season An extra early, exceedingly prolific and continuous-bearing variety; a distinct and attractive selection of the White Spine class; the shape is unique, longer than most sorts, tapering at each end, slightly ridged throughout, with but few "knobs." The color is beautiful dark green, is one of the best Cucumbers for slicing and general use, the flesh being remarkably firm and crisp; it also yields a remarkable large number of fruits for pickling, and holds its crop for an unusually long period. (See cut.) Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25.

Early Express This remarkable and valuable new variety is the earliest variety in existence. Quality is the very best, being free from any rank, strong flavor, and it is as fine a variety for slicing as any later sort. Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.50.

RATEKIN'S ENAMELED (Perfect)

This new cucumber we bred up for extreme earliness and quality. It certainly has proved itself the earliest cucumber that we know of and one especially adapted to the hotbed or early garden. It sets its fruit quickly and produces beautiful cucumbers in the shortest possible time, and if kept picked, will continue bearing for a long time. Packet 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00

Davis' Perfect By using this variety gardeners can produce out-of-door varieties that will sell in the market for hot house forcing varieties. The shape is ideal. It is almost seedless one-third of its length from the stem, and the few seeds contained in its blossom end when in eating condition are so small and tender they are hardly noticeable. Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.50.



Ratekin's Emerald Perfect.



Improved Chicago Pickle.

Japanese Climbing Cucumber A marvelous climbing variety introduced from Japan. The vines are strong growing and immensely productive, it being estimated that it will yield three times as much as other varieties in a given space. The fruits are of good size and of fine flavor, adapted especially for slicing and salads. Does best in dry warm summers. Packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

Improved Long Green Fruits average ten to twelve in. in length. Skin a deep rich green; flesh solid, crisp and of excellent quality. This is an extra selected strain of the original type and can be depended upon to produce the true long dark green fruits, excellent alike for slicing or pickling. Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.50.

Chicago Improved Pickle This variety, which originated with a leading pickle grower near Chicago, is considered the best variety there is, as it is very prolific, matures early and produces an immense number of desirable shaped pickles. Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$1.90.

Early Cluster Vine vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. A very productive sort. PRICE: Pkt., 5c; oz., 10c; 2 oz., 15c; ¼ lb., 40c; lb., \$1.50.

Fordhook Pickling A small, oval, prickly variety, quite distinct from all others. It is grown exclusively for pickles; is the smallest of all varieties and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks. Pkt., 5c; oz., 20c; ¼ lb., 75c; lb., \$2.50.

Boston or Jersey Pickle Is used almost exclusively by the market gardeners for pickling. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60.

Cool and Crisp A strain of the White Spine, somewhat like the Arlington, but larger. Fruit long, cylindrical, dark green. Fine for table use. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 70c.

Sweet or Sugar Corn

Golden Bantam Is each year more firmly fixed in popular favor because of its extreme early character, vigorous growth and surpassingly delicious flavor. We have had hundreds of letters from customers, giving it the highest praise as the finest extra-early sweet corn they have ever grown.

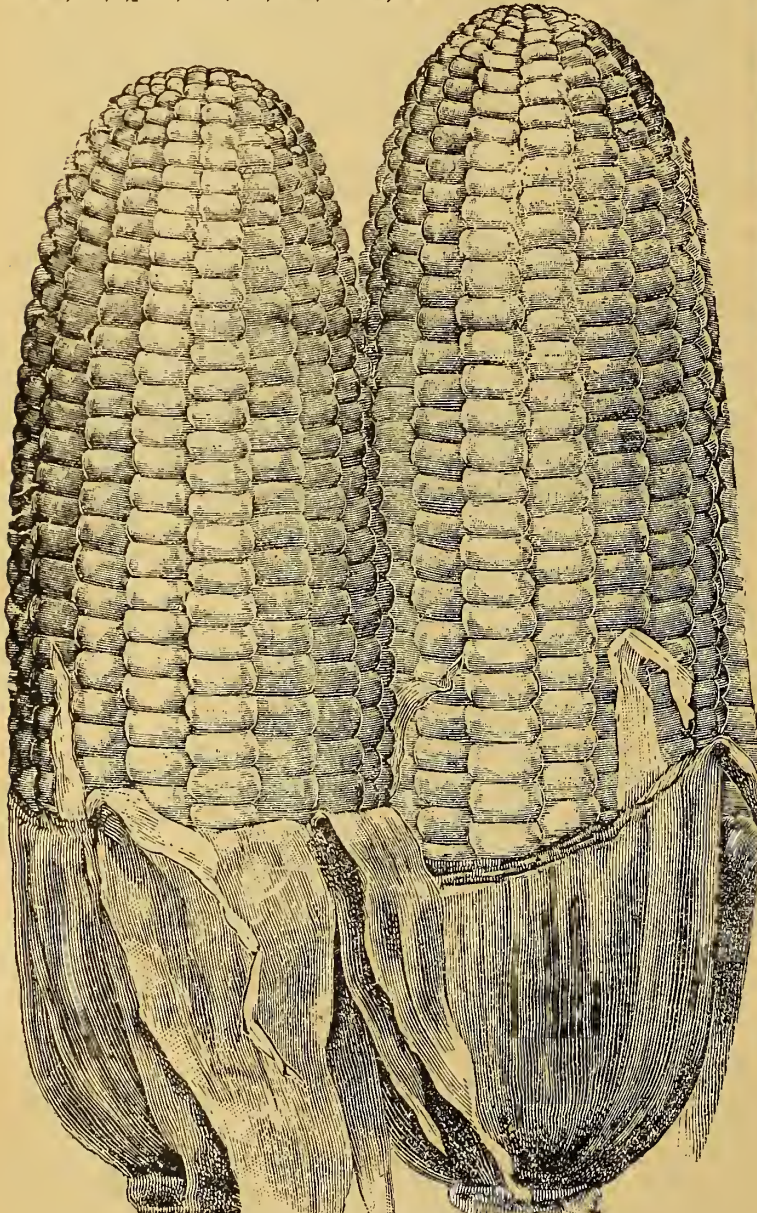
Although the dry grain is entirely free from any flinty glaze it is exceptionally hard and firm, hence can be planted earlier than any other true Sweet Corn. The stalks are dwarf and sturdy in habit, growing to a height of four feet. They bear two and three good ears which are set well above the ground. The ears, five to seven inches in length, have eight rows of broad, yellow grains, extending to the extreme rounded tip.

Many market gardeners report that they find **GOLDEN BANTAM** their most profitable variety throughout the season (from successive plantings), as soon as customers become acquainted with the splendid flavor and distinct color.

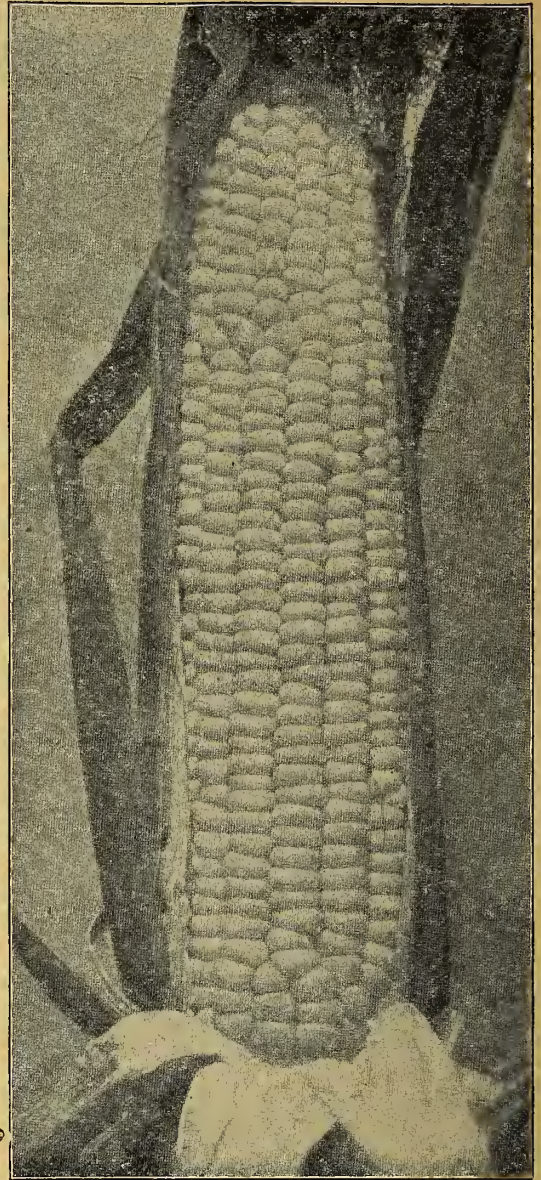
GOLDEN BANTAM is as distinct in flavor from that of white varieties as in color—being almost literally "sweet as honey." The skin is so exceptionally tender that it does not need scoring or cutting across the grain. Pkt., 5c; ¼ lb., 10c; lb., 30c; 3 lbs., 75c.

Early Minnesota A standard early variety that has held a high place in the list of sweet corns ever since its introduction. The ears are of good size, well flavored and of the best cooking qualities. Valuable for either private or market use. Pkt., 10c; ½ lb., 15c; lb., 30c; 3 lbs., 75c.

Crosby's Early For medium early use and general crop this is one of the most desirable varieties. Ears are of medium size and the cooking qualities excellent. A good cropper and profitable for family use and as a market sort. Pkt., 5c; ¼ lb., 10c; lb., 30c; 3 lbs., 75c.



Peep O'Day—The Earliest Sweet Corn.



Golden Bantam.

Peep o' Day Originating in the far north this variety is therefore extremely early in maturing. Besides this important feature it is a "Sweet Corn" in the true sense of the word, being remarkably sweet and tender. The stalks grow about four and one-half feet high, and are usually very prolific, producing from two to five ears each, which measure about five inches in length and are well filled. ¼ lb., 10c; lb., 30c; 3 lbs., 75c.

Mammoth White Cory The largest and best extra early sweet corn. The stalks are no larger than those of the "White Cob Cory," but each stalk furnishes two or more large, fine shaped ears. An early sort. The beauty and quality of this variety give it ready sale, even when the market is overstocked. Pkt., 10c; lb., 25c; 3 lbs., 75c.

Country Gentleman This variety is often called the "shoe peg" corn, owing to the arrangement of the crowded kernels which are long and very sweet. The ears average nine inches in length and are borne from two to five and sometimes six on each stalk. Of the finest quality. If you try this variety you will like it. Pkt., 5c; ½ lb., 15c; 1 lb., 25c; 3 lbs., 75c.

Improved Stowel's Ever-green A general favorite with canners. Ears are medium to large size; exceptionally tender. Pkt., 5c; ¼ lb., 10c; lb., 25c; Not prepaid, ½ pk., 55c; pk., \$1.00.

Ratekin's Improved Egg Plant



Ratekin's New York Spineless Egg Plant.

Our superior stock of this popular variety produces a large crop of shapely purple fruits of liberal size and perfect quality.

The plant is of low growth with a vigorous branching habit, strong enough to support its massive fruits, and compact enough to economize space.

It is very prolific, the fruits are of a pleasing purple color, and the quality superb. Pkt., 5c; oz., 35c; ¼ lb., 90c; lb., \$3.25.

Early Long Purple The earliest variety, in existence, Pkt., 5c; oz., 25c; ¼ lb., 90c.

Ratekin's Black Beauty The earliest and best of all large fruited egg plants. The large fruits are thick, of most attractive form. The skin is a rich, luscious, purplish black. The fruits set freely and develop quickly so that the entire crop can be gathered before there is any danger of frost. Pkt., 5c; oz., 35c; ¼ lb., 90c.



Earliest Short-Leaved White Vienna Kohlrabi.

Ground Celery This little fruit grows well on any dry soil; is easier raised than the tomato, are prolific bearers, and luscious fruit. For sauce or pies they are excellent; delicious as preserves and when dried in sugar are better than raisins for cakes and puddings. No one, after raising them once, will ever make a garden again without devoting a portion to the Ground Cherry. Pkt., 5c; ½ oz., 20c; oz., 30c.

Kohl Rabi
One ounce to 3,000 Plants.

A popular vegetable, intermediate between the Cabbage and the Turnip. Sow in drills from May to July. It is extremely tender and partakes of the flavor of both Turnip and Cabbage. Should be in every garden.

Early Purple Vienna

A bright purple. The leaf and stems are tinged with purple. Pkt., 5c; oz., 30c; 2 oz., 55c; ¼ lb., \$1.00; lb., \$2.75.

Early White Vienna

Flesh white and tender; good market sort. Pkt., 5c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.75.

Endive

(One ounce will sow about 60 sq. ft.)

Preferred to lettuce by those who have tried it and should be more largely used. One of the best and most wholesome salads for fall and winter use. Sow seeds in April for early use or in June or July for winter use. When leaves are 8 inches long tie together with a string near top to blanch.

Green Curled Has finely cut leaves and makes a handsome plant. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

Giant Fringed Also called winter lettuce. This fine new variety is the best of all. It is a strong, vigorous grower, making a large, white heart, and the leaves are beautifully curled, and of best quality. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

Gourds Cultivate like cucumbers; may be trained over lattice work, fences, etc.

Japanese Nest Egg Grows almost uniformly to the size, color and shape of a hen's egg. The shells are hard and make the very best of nest eggs, as they do not crack. The largest ones, when sawed in two, make excellent pots for starting tomatoes, strawberry and other plants. Pkt., 5c; oz., 20c.

Dipper Makes a lighter and more convenient dipper than can be bought. Dippers of various sizes of a capacity from a pint to a quart and a half, can be had from a few vines. Pkt., 5c; oz., 20c.

Mixed Utility Seeds mixed. This is very popular with our customers. Many grow them as curiosities, but they are really useful in many ways. They are easily grown and will repay the work expended. Pkt., 5c; oz., 20c.

Ornamental Mixed A mixture of odd-shaped and fancy-colored sorts. Many handsome and useful small gourds in this mixture. Also offered among ornamental climbers in flower seed list. Pkt., 5c; oz., 30c.

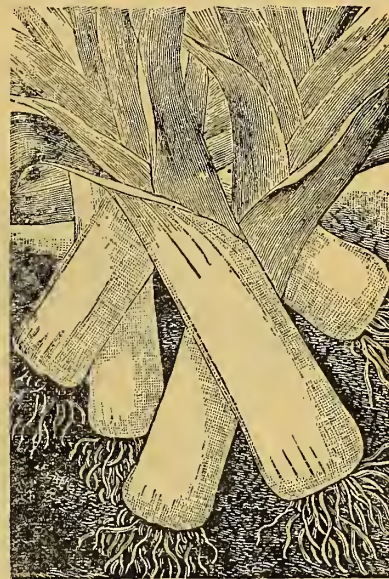
Leek

Leek is closely allied to the Onion. The entire lower portion of the plant is used, which is smooth and solid and is very generally used as a vegetable and in soups.

Sow early in spring and when 6 in. high transplant into rows 6 inches apart each way and as deep as possible, to perfect the blanching process. The richer the soil the finer the Leek. 1 oz. to 100 feet of drill.

LARGE AMERICAN FLAG LEEK—A favorite variety. Pkt., 5c; ¼ lb., 35c.

Musselburg or Scotch Champion. Grows to a large size. 1 oz., 15c; ¼ lb., 40c.



Large American Flag.

Mustard Used as a condiment and the green leaves are also used as a salad or boiled like spinach.

SOUTHERN GIANT OR CHINESE—In great demand on account of its large, crimped, frilled, bushy and prolific leaves. Pkg., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

ELEPHANT'S EAR—A new variety with numerous tremendously large, broad leaves of good substance and of most appetizing pungency; they are of light green color and have large white ribs. Pkg., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Chufas A nice little ground nut greatly liked by children. Its flavor resembles the coconut. Very prolific, a single one yielding 200 to 400 nuts growing just under the ground. Grow best in light, sandy soil, well fertilized. Plant in April, 10 inches apart, in 2½-foot rows. Cover lightly. Soak seed before planting if very dry. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Garlic In great demand among all classes. Common Garlic Sets—¼ lb., 15c; lb., 35c; lb., by express, 20c.

Italian—Very prolific. Grown from imported bulbs, very rich and desirable. ¼ lb., 15c; lb., 40c. By express: lb., 30c; 5 lbs., \$1.25.

Lentils A leguminous annual plant resembling peas, with round, flat seeds, which are much used for soup and make a delicious dish; they are also splendid for pigeon feed. The stems and leaves make good fodder. Succeed well on dry, sandy soil. Pkg., 10c; lb., 20c, postpaid. By express: 10 lbs., \$1.00.

Ratekin's Superior Lettuce Seed

(One ounce will sow 100 ft. of drill.)

No vegetable is more universally used than lettuce, and to be thoroughly appreciated it must be brought to the table fresh and unwilted. Quality depends largely upon rapid and vigorous growth. Sow in hotbed in March and in open ground as early as it can be worked, thinly in drills one foot apart. For succession, sow every three weeks during season. Thin out plants as they grow.

Grand Rapids Lettuce

This grand lettuce delights all who grow it. It is equally suited for the market gardener and the private planter. The market gardener will find that this lettuce will command a premium over other sorts on account of its appearance and quality, while for private gardens no other lettuce approaches it for table use. For salads it is unequalled. A forcing variety of superior quality and appearance, strong grower, free from rot, and keeps crisp and tender without wilting when exposed for sale longer than any other forcing lettuce. It is also a desirable variety for sowing in open ground. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.20.

Early Curled Simpson

An improved variety of Curled Simpson, with large, loose head and excellent flavor. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.

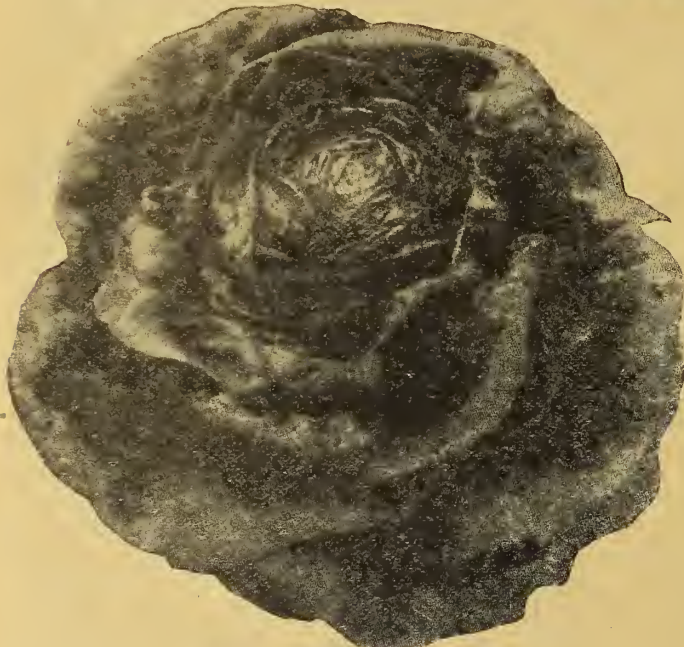
California Cream

A splendid variety for summer. It produces a very large and white head. It will stand extreme heat and is slow to go to seed. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Iceberg Has unusually solid head, is quick growing and always crisp and tender, whether propagated in early spring or in the hot days of summer. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 90c.



Grand Rapids Lettuce.



Ratekin's Early Prizehead.

Ratekin's Early Prize Head It forms a mammoth head and remains tender and crisp throughout the season; is prompt to head, but slow to seed, of superior flavor and very hard. Leaves of dark reddish brown color, variegated with dark green. It is an immensely popular variety. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 90c.

Market Gardeners (Ratekin's Private Stock.) This is one of the very best of the "Butter" head lettuces. It is a very great favorite with market gardeners on the city markets, and with them holds the lead in point of popularity. This is getting to be equally true in other markets. Large pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00, postpaid.

Ratekin's May King Lettuce

Equal alike for forcing under glass or outdoor planting. The plants are of quick growth, practically all head and handsome, and have a **SPECIALLY FINE, RICH, BUTTERY FLAVOR**. The solid round heads are so firmly folded that they can be shipped to distant markets and arrive in the best of condition. It is the very best lettuce for early planting in the spring, and again during August and September for fall use. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00.

A GRAND LARGE CABBAGE LETTUCE.

For Either Midsummer or Fall Use. Big, Compact, Tender and Crisp, Creamy-White Heads.

This grand variety has proven to be most valuable, is now more extensively grown than any other kind of lettuce, either for the private table or for sale, North, South, East or West. It invariably gives both grower and user the utmost satisfaction, producing during all seasons, under ordinary conditions, splendid large heads, packed with thoroughly blanched leaves, crisp, tender, sweet and white. It may be seen in the vicinity of northern Iowa as late as November 15th; a slight covering of salt hay amply protects the plants from hard frosts. Thousands of acres of it are grown during the winter in Florida and other Southern States for shipping to northern markets. In fact, we know of no other variety that gives such general satisfaction under so many varied conditions. Pkt., 10c; oz., 20c; ¼ lb., 50c; lb., \$1.50.

Ratekin's Improved Hanson

For general use for market and gardeners we are sure that no variety can surpass our **"IMPROVED HANSON"** Lettuce. Deliciously sweet, crisp and tender, and absolutely free from any rank or bitter taste. Resists the summer heat extremely well. It cannot be too highly praised. Pkt., 5c; oz., 10c; lb., 25c; 1 lb., 90c.

Salamander An excellent spring, summer and fall variety, forming good-sized heads. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.

Black Seeded Simpson It is light colored, grows large in size; of fine quality. One of the best for forcing or outdoor planting. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

RATEKIN'S GEM OF EDEN CANTELOUPE

A Prize Winner at the Rockyford Colorado Fairs

Our Melon Trade, Strange as it may seem to some people, it is no penny-wise part of our seed trade. There is scarcely an order that comes to us that does not include Melon seeds of one kind or another. About everybody who plants any kind of seeds plant Melons, some only a few hills others a ½-acre and others from 1 acres to 10-20 and as high as 50 acres. Everybody likes Melons. There is nothing more palatable, or relished more, on the table, along the roadside or out in the field where one is at work, when they want to take a little rest or breathing spell. In view of the great demand for the best kinds and varieties we have for many years made Melons one of our specialties and have gone to the expense of visiting Melon Seed Growers and localities where melon growing and vine seed growing is made a specialty. As a result of our investigation and in the interest of our trade and experience, out of all the fine varieties, including quality, we found a private grower of melon seed at Rockyford, Colorado, with whom we made an exclusive contract, for the growing of all our Musk Melon, or Cantaloupe Seed, and selected among other varieties one of the finest Melons we have ever seen produced anywhere, without regard to time, plant or locality—**THE GEM OF EDEN.** This melon or cantaloupe is certainly all the word implies, "**THE GEM OF EDEN,**" and while we have every confidence in the integrity of our grower and found him a gentleman in every respect as far as we know or could learn, we take no man's word on quality and purity of our seed stock, as there is too much at stake, considering our large trade on melon seeds; therefore we send one of our representatives to Rockyford at time of saving seed to carefully inspect the stock from which our seed is saved and no melon is allowed to be cut that does not come up to contract; first class in standard and quality. And our representative remains there until the seeds are washed, dried, sacked and put aboard the cars for shipment. We cannot afford to do otherwise, especially when we pay a premium price on extra select stock, beside the protection of our trade and our customers who purchase their seed from us, both in large and small quantities.

The Gem of Eden is a Cantaloupe which we can stand behind, endorse and fully recommend to our customers as the very best that has ever been produced anywhere or any place. One great trouble with most Cantaloupe seed and the product; the commercial growers try to get the most seed off a given amount of ground and are inclined to save seed from about all kinds of melons, good melons, sick melons, scrub melons, green, unripe melons, all kinds, good, bad and indifferent, and of course like begets like all along the line and the products of such seed and melons are not only unsalable, but are no good for table or any other use.

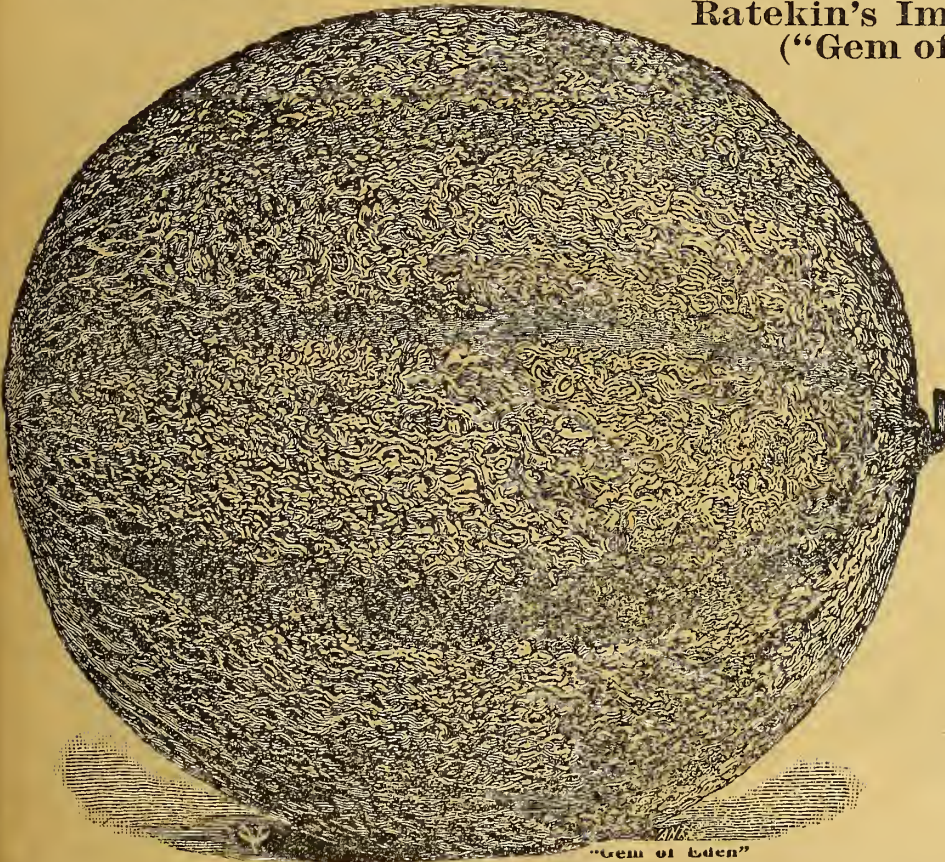
"Ratekin's Gem of Eden" is a vigorous grower from the start and keeps the vines growing and produces ripe melons as early as the earliest; is a heavy and continuous bearer; bearing fine melons long after other sorts have faded away. Gem of Eden is the most resistant to rust and disease of any other cantaloupe we have any knowledge of.

THE GEM OF EDEN costs—selected and handled as our seed is—more than double what we could purchase common commercial seed for from wholesale growers; therefore we are compelled to sell them a little higher than commercial grown seeds are sold for. But they are decidedly cheaper, ten to one. Let us count cost for a moment: What does it cost you to pay 5c per packet or 60 or 75c per lb. for stock seed that produces but little else or nothing than dwarf, sickly vines and fruit that you would be ashamed or turn sick to place on your table? No one knows just what such seed costs in the way of time, labor and disappointment. But the price for the **BEST THERE IS GOING** is so small it is almost silly to think or talk about when 3 lbs. of seed will plant a whole acre of ground, which ought to produce a crop worth \$100.00 clear money.

Muskmelon **CULTURE:** Plant seed in hills 4 to 6 feet apart each way, after danger of frost is over. Use well rotted manure in the hills. Insert seed just under the surface of soil; 1 ounce to 60 hills; 3 lbs. to 1 acre. Thin out, leaving only 4 plants to a hill. A light, warm soil is best. In hoeing draw the soil well up to the plants. Fight bugs with tobacco dust. Slug Shot. air slaked lime, land plaster or Bug Death.

Ratekin's Improved Rockyford ("Gem of Eden") Rustproof

This type is the highest development, both as to netting and rust-resistant qualities, yet attained in the Rocky Ford Cantaloupe. When vines of some varieties are entirely killed by rust and blight within two weeks after the shipping season, the vines are green and continue to blossom and set fruit until frost. The melons run very uniform in size and are exceptionally heavy netting is laced and interlaced over the entire surface, making it an ideal shipper. The flesh is green, shading to salmon about the seed cavity which is unusually small. The meat is solid and fine grained, flavor unexcelled. While a few days later than the Early Hackensack, it is more prolific. Desirable where there is an excessive rainfall. Pkt. 15c; oz. 25c; ¼ lb. 60c; 1 lb. \$2.00; 3 lbs. \$5.00.



Extra Early Hackensack We offer under this name a very distinct stock, different and superior to that often sold as Extra Early Hackensack. The fruit is medium sized, nearly round, with deep ribs and very coarse netting. The flesh is green, very juicy and sweet. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 90c.

Ratekin's

Perfection



A Prodigious Cropper. Spicy
Green Flesh. Small Seed Cavity.

Ratekin's Perfection

A Distinguished Melon
High Bred at Every Point.

A paragon of merit—in size, shape, netting, appearance, aroma, flavor, depth of flesh, smallness of seed cavity, cropping ability and shipping quality. It leaves nothing to be desired. Ratekin's Perfection is an early melon, maturing in Iowa the last of July to the first of August. It is larger than Rockyford, the average weight being somewhat above 2 lbs. It has an ideal shape for a fashionable market. The flesh is green. The interior seed cavity is small, and of triangular or prismatic shape, the seeds being few. As a table melon Ratekin's Perfection cannot be surpassed. In delicacy and quality of flavor it is unexcelled by any variety on our list. The flesh is

deep and firm, extending from the rind almost to center of the melon.

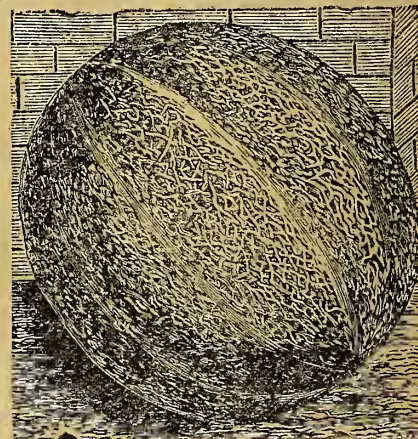
Ratekin's Perfection has every good quality possessed by the Rockyford, with the added value of being more productive. It will show the effects of long continued drought, in common with all forms of vegetation, but does not seem to lose its strength while lying dormant under a scorching sun. Upon the coming of rain it responds at once in the way of continued growth and abundance of fruit. Ratekin's Perfection is now sold all over the United States under a half dozen different names. Send to headquarters for the genuine Seed. Pkt., 10c; oz., Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00, postpaid.

Burrell Gem "The new Rockyford Melon with Golden Meat." This describes the melon fully. In appearance it looks just as the best types of green fleshed Gems. Pkt., 5c; oz., 15c; ¼ lbs., 30c; lb., \$1.00, postpaid.

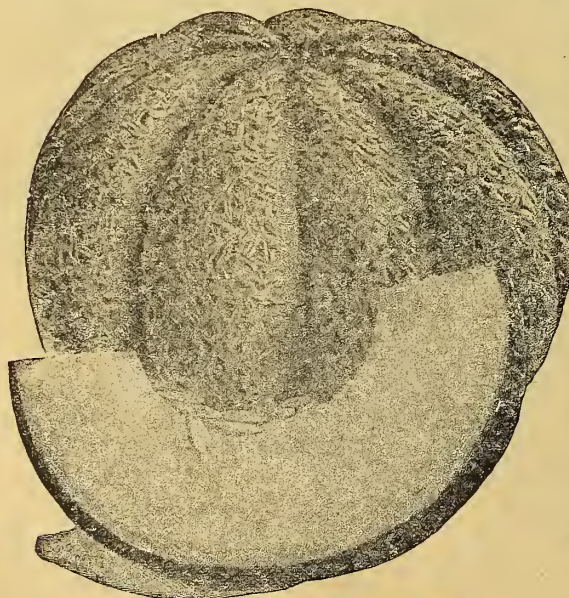
Emerald Gem One of the most delicious little melons that we have ever eaten. The flesh is almost red, and ripens thoroughly to the thick, of a salmon color, extreme thin rind. It is peculiarly crystalline in appearance, juicy and rich. The flavor is sweet and luscious beyond description. Nice for home use. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Paul Rose, or Petoskey

Combines all the good qualities of the Netted Gem and Osage, the varieties from which it originated, possessing the sweetness of the latter with the finely netted appearance of the Gem. Fruit oval, about 5 inches in diameter, shape and general appearance similar to the Netted Gem. Large pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00, postpaid.



Paul Rose or Petoskey.



Ratekin's Netted Gem (Rockyford).

One of the best of our early Melons. During the last few years they have largely increased in popularity, on account of the excellent quality and flavor of this Melon as shipped from Rocky Ford (Colo.). Growers and seedsmen are undecided as to whether it is owing to any particular quality of soil or climate, or to persistent selection that has brought the Rocky Ford type of Gem into such great prominence. We offer a selected stock of true Rocky Ford type. The melons are oval in shape, very uniform in size, with thick-meated green flesh of a melting and delicious flavor. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Watermelons, the World's Best Varieties

Culture A light, sandy soil, with good exposure to the sun, is the best situation to plant Watermelons. The ground should be prepared deep, but receive shallow cultivation. Hoe often and very thoroughly. Plant in hills 8 to 10 feet apart each way, with a very generous shovelful of well-rotted manure mixed with the soil in each hill. Plant 8 or 10 seeds in each hill, and finally, when danger from insects is past, thin out to three strong plants. Packets are about right for small gardens. One ounce of seed will plant 20 to 30 hills; 4 lbs. will plant an acre.

Ratekin's New National Melon



Ratekin's New National Watermelon.

mands. To be absolutely safe and sure to obtain some of this seed we wish to urge you to order early in the season. Pkt., 15c; oz., 20c; ¼ lb., 50c; ½ lb., 90c; lb., \$1.60; 5 to 10 lbs. and over, \$1.50, prepaid.

Monte Cristo or Kleckley Sweet

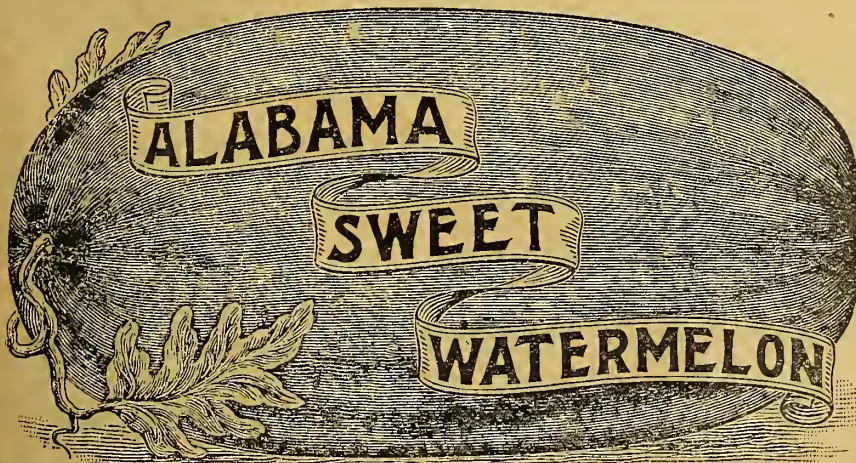
Special strain of this grand market gardener's melon. Large, oblong, 26 inches in length by 10 to 12 inches in diameter, dark green, flesh bright scarlet, rind only about ½ inch thick. Extremely sweet and sugary and of such tenderness that it leaves no strings or pulp whatever. It is a melon for home use, but ships very well. Undoubtedly one of the best melons of today. We paid \$1.50 per pound for the first seed received from the originator and have made a specialty of improving this variety. We are absolutely certain there is none better. This variety is most reliable and you can depend on having fine melons when you plant our seed. Pkt., 5c; oz., 15c; ¼ lb., 30c; ½ lb., 55c; 1 lb., \$1.00.

Mountain Sweet The old standard. Best quality. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.



The Oklahoma Gem

A car of the finest melons we have ever laid eyes upon, came to this city five years ago. We do not know the name of them, but it is perhaps enough to know that they were world beaters. They were uniform in size, running from 35 to 40 lbs. each. By chance we purchased a half dozen of these, of the most choice melons, and from them saved the seed. This is the way we got our start. They are a Mammoth Ironclad of immense size, handsomely marked, oblong shape, flesh scarlet red and very solid, juicy and the sweetest melon we ever ate. The rind, while very thin, is remarkably hard and tough, which makes it a long keeper and splendid shipping melon, one of the best we have any knowledge of. We named it "The Oklahoma Gem." Pkt., 10c; oz., 15c; ¼ lb., 30c; lb. \$1.00, prepaid. Not prepaid: 5 lbs., \$4.00. They are sure Gems. Don't fail to try some of them.



Alabama Sweet

Alabama Sweet is a dark green melon with light seeds. It is first class. It is of good size, though not ungainly like Triumph. Its flavor is simply delicious and its outside appearance is attractive. Its size and shape are such as to make it a first rate business melon. It has been fully tested, and I am confident that it will be a prize winner in all melon growing sections. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Atlanta, Ga.

Gentlemen: Kindly quote me your best prices on 40 lbs. Tom Watson melon. I used your melon seed last year and had splendid success. Yours truly,

C. B. CARRUTHERS,

Springfield, Ohio.

Gentlemen: Your Tom Watson is one of the best melons I have ever grown. I ordered 1 lb. of seed from you last year and had the very best of success. Yours truly,

W. W. THOMPSON,

Niangua, Mo.
Quincy, Ill.

Gentlemen: The melon seeds arrived today and are fine. Thanks for your promptness and also for the extras. Yours truly,

R. E. WALKER.

Dear Sir: Received the seeds I ordered from you and they were sure fine. Thank you very much for the prompt attention you gave my order.

Very respectfully,

A. B. LANGDON.

Watermelons---The World's Best Varieties

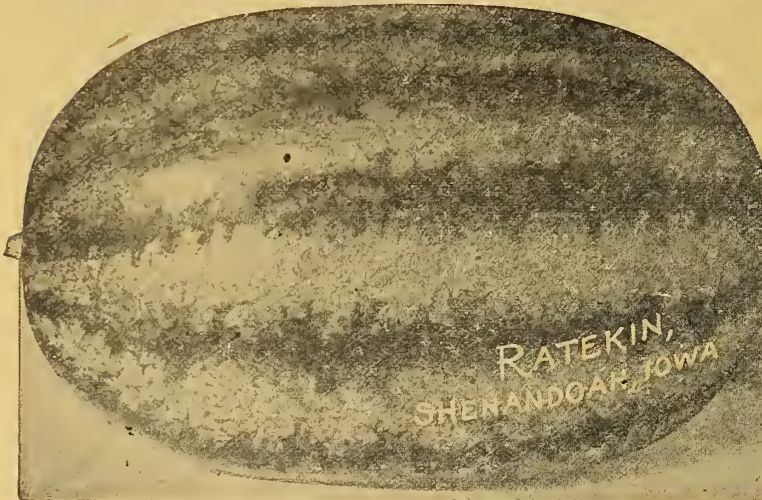
To Melon Growers: **STOP TO THINK:** RATEKIN'S "FULL OF LIFE" Melon Seed is produced from Pedigreed Melons; positively saved from Hand Cut, Personally Selected, Thoroughbred Specimens, distinctly marked, uniform in Size—Ideal Shape—Color and Flavor; fully developed, insuring the highest degree of perfection—you will readily appreciate the vast superiority of our "FULL OF LIFE" Strains in comparison to average quality offered by many dealers as **CHEAP SEED**, which is generally saved from **CULLS** of crop, after the **BEST** Specimens are marketed. If you want the Best Melon Seed That Can Be Grown—Send to **RATEKIN'S SEED HOUSE, Shenandoah, Iowa.**

Plant the Watson or "Tom Watson" Watermelon. It's a Good One



"TOM WATSON" WATERMELON

There are a few people that agree with Tom Watson's political views and many that don't. However, we never have seen anybody that didn't acknowledge that the Watson Watermelon was the best melon they ever grew. We have watched this melon for several years and grew it in our seed crop last year. It's an all right melon in every respect. It has the best of eating qualities and it stands shipment as well as the best of shipping melons, such as Seminole, Champion, Kolb Gem and others. If you grow the Watson melon you have something that sells on sight in all the markets at a good price; it stands shipment perfectly and if you eat it at home you won't find it inferior to the Monte Cristo, Kleckley or Alabama Sweets. The Watson is an all right combination melon, good at all times and for all purposes. Pkt., 10c; oz., 15c; ¼ lb., 35c; pound, \$1.00, postpaid. 10 pounds or over, not prepaid, 75c per pound.



Ratekin's Champion.

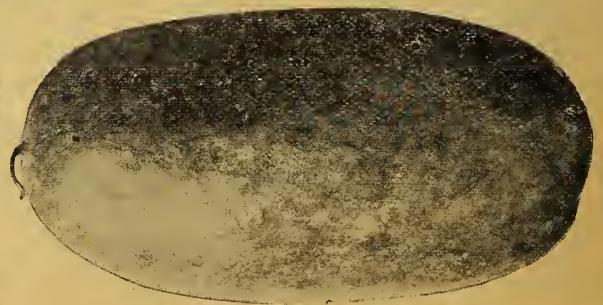
Georgia Rattlesnake This is the variety that made Georgia famous as a melon state. No place in the world produces such melons as the Rattlesnake. No one has such seed of the famous variety as ourselves. It is simply perfection. Every seed of it is taken from melons weighing 30 lbs. or over. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Alabama Sweet The genuine strain grown almost exclusively in the Southwest. A splendid combination melon. Sells on sight in either Southern or Northern markets. Early, bright scarlet flesh. Pkt., 10c; oz., 15c; ¼ lb., 30c; lb., \$1.00, postpaid.

Florida Favorite Special selection and growth, large, smooth, beautifully shaped melon, of dark green color, an unsurpassed extra early, good quality, medium sized melon. Just the right kind for home use. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c, postpaid.

Ratekin's Champion A cross between Kolb's Gem and Sweetheart. All that could be said of **KOLB'S GEM** as to good shipping qualities can be truthfully stated in a higher degree of **RATEKIN'S CHAMPION**. All the praise of high quality bestowed on the Sweetheart can be repeated of our new melon, but its prominent point of merit is its extreme size. **NO MELON EVER YET PRODUCED ANYTHING LIKE SO UNIFORMLY LARGE FRUIT, NOR APPROACHING IT IN PRODUCTIVENESS.** Melons weighing from 40 to 60 lbs. are frequent. It is the most prolific watermelon ever grown. Its color is a rich, dark green. Of uniform, symmetrical shape, roundish to bluntly oval, and this similarity of shape running through the whole field. Pkt., 10c; oz., 15c; ¼ lb., 35c; lb., \$1.25.

Ratekin's Sweetheart Melon This melon is early, large, handsome, heavy and productive. Shape is oval; color, very dark green. Flesh bright red, solid, tender and very sweet. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.



Ratekin's Sweetheart Melon.

Watermelons—Continued

A Word to Melon Growers Ratekin's Melon Seed is saved from Hand Cut, Personally Selected, Thoroughbred Specimens, distinctly marked, uniform in Size—Ideal Shape—Color and Flavor; fully developed, insuring the highest of perfection. CHEAP SEED is generally saved from CULLS of crop after the BEST specimens are marketed. If you want the BEST SEED THAT CAN BE GROWN, let us have your order. If you want the Cheapest Seed that is offered, send to the fellow that is offering them cheapest.

RATEKIN'S MELON SEED, both Watermelon and Muskmelon (Cantaloupes) are saved from crops grown exclusively for seed purposes. No Seed is taken from Watermelons weighing less than 15 pounds, and seed from Cantaloupes that show perfection in every detail. We feed hogs on the quality of melons from which some of the commercial growers save seed from.

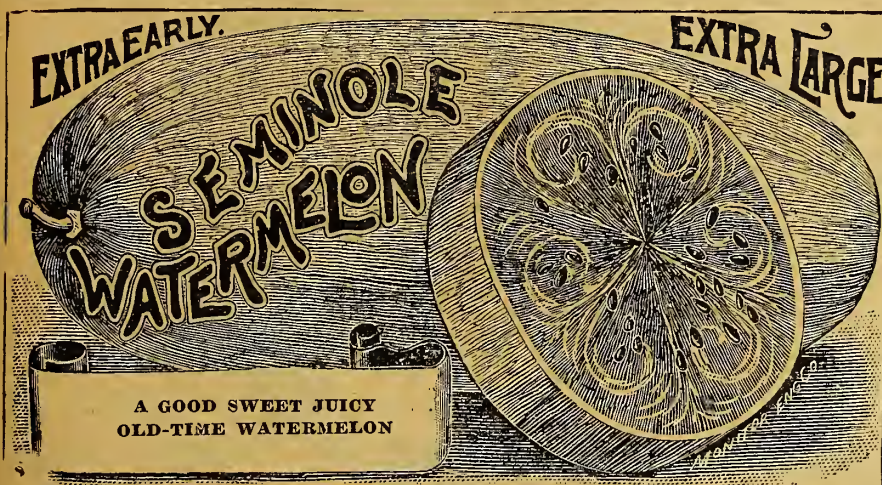
Ratekin's Reliable Melon Seeds Please Everybody—They Grow Big Fine Melons Everywhere

Grant Co., Okla., Oct. 3, 1914.

RATEKIN'S SEED HOUSE, Shenandoah, Iowa: We have some splendid watermelon seed of different varieties, which we bought from you, including some of the "Tom Watson" for sale. We found this seed true to name. All are free from any other vines, as we have no vines of any other kind on our farm. We planted our seed on poor, sandy land, only had one hoeing, no other cultivation and we sold eight carloads of melons, cars running 1,300 to 1,500 per car and weighing from 30 to 70 lbs. each; besides, we sold out a lot locally and still had the ground covered with finer ones than we sold, as we had some late rains—had no spring rain at all. The best ones we seeded, for which we want to find a market. Enclosed I send pictures of actual melons grown and shipped. For truth of this you can write _____, also to Cashier _____, Bank of _____, where they were loaded on the cars. Please give me early reply, as I want to start to school soon. Respectfully,

E. A. SHIRE.

(P. S. We regret we cannot give illustration of photographic picture above alluded to, but they certainly represent the finest form and shape melons we have ever seen, running from 24 to 30 inches in length.—RATEKIN'S SEED HOUSE.)



First Class Seeds

Watermelon Seed is one of our leading specialties. We sell many tons every season.

REASONABLE PRICES.

We do not attempt to sell seeds at the lowest prices, but we do endeavor to supply the best seeds obtainable as low as first class seeds can be sold.

Grown Strictly for Seed.

All Seed Taken from Selected Melons Only.

Phinney's Early

Early, medium size and productive. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.00.

Seminole Watermelon Here is a melon that may be styled an old-timer, for it has stood the test of time, always and everywhere proven to be among the best, earliest, surest and most productive. It is one of the sweetest, juicy melons there is grown and among the earliest to produce ripe fruit. A beautiful red core makes it very attractive and its fine quality makes it most delicious to the craving appetite during the long, hot summer days, when nothing is so appetizing as a nice melon just plucked from the vine. The above illustration shows its exterior and beautiful shape better than we can describe it—one of the first to bear and longest to continue bearing its fruit. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c; 5 to 10 lb. lots, prepaid, 70c per lb.

Mammoth Ironclad The rind, while very thin, is remarkably hard. One of the very best. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c, postpaid.

Black Diamond It is vigorous, and earlier than any standard variety. Is immensely prolific, one melon grower loading five cars from five acres of it and then had large quantities of salable melons left. The melons in these cars averaged 34 lbs. each. Melons are of very uniform shape and as good in shipping as Kolb's Gem. Of a deep, glossy green color when ripe, which gives them the appearance of having been varnished. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c, postpaid.

Kolb's Gem This variety on account of its excellent shipping qualities, is extensively grown for that purpose. Grow nearly round, and the color is dark green, with lighter, narrow stripes; very thick and tough rind. Flesh light red and of good flavor. Our seed is choice. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 80c.

Apple Pie Melon

Don't Fail to Try It This novelty of unusual value that will appeal to my customers. Fruit and vine grow similar to the watermelon, but flesh is used exclusively for sauces, pies and preserving, etc., having a most delicious flavor, resembling the flavor of apples. Flesh white and solid. Each vine produces 5 to 15 melons; one of large size will make as many pies as a half bushel of apples. They keep fresh and solid all winter, so can be used when wanted. It will pay to raise them. This melon is not for eating in its raw state, but for preserving, and largely used for this purpose. Pkt., 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

I have always found your seeds and your catalog on the square. The catalog gives honest descriptions and your seeds produce the vegetables. I am again enclosing my order for what seeds I shall want.

Yours truly, J. N. WILSON,
Carlisle, Ind.

New Castle, Tenn.

Our seeds ordered from you last year gave splendid results, and I am again enclosing you my order for what seeds I will need. I also wish to thank you for your prompt service. Truly yours, MRS. ANNA HEVLIN,



Bedford, Ky.

I have ordered my vegetable seeds from you for the past five years and have always had excellent results and success from them. Enclosed find my order for seeds again this year. MRS. MARTHA WALKER,

Onions. Seed a Leading Specialty

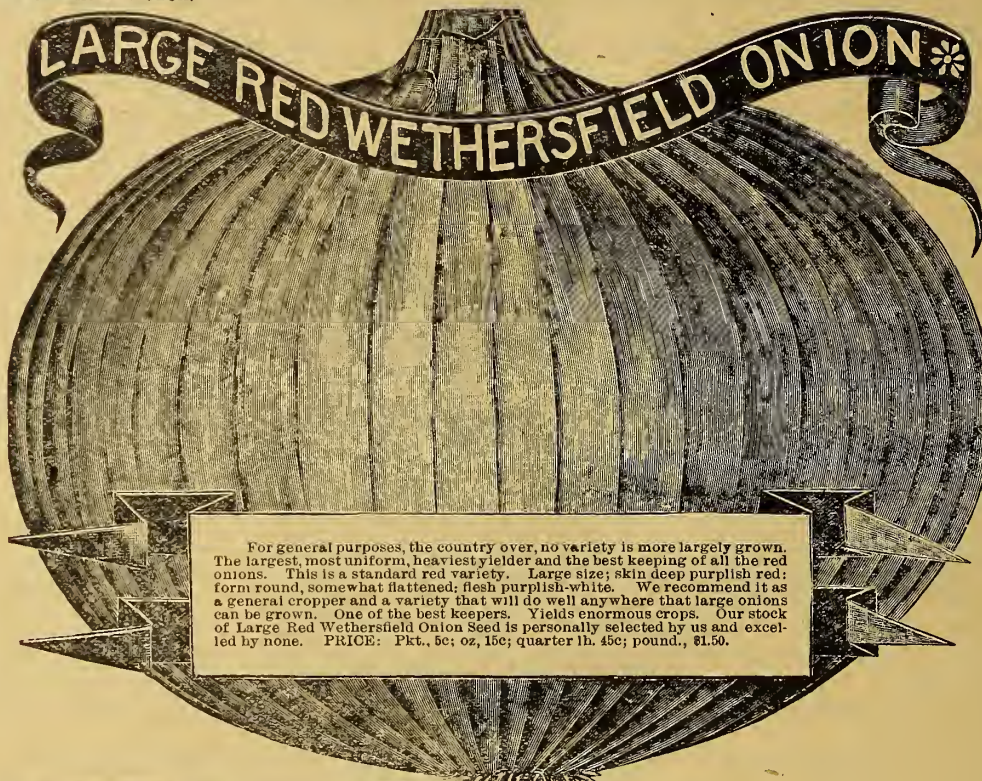
FIRST QUALITY ONION SEED

We Want to Sell You Your Onion Seed

There is no crop which depends more upon the quality of the seed than the Onion crop. GOOD ONION SEED is of vital importance, if you expect satisfactory results. The seed we offer is not surpassed anywhere; have been thoroughly tested for vitality, so that success is certain where soil and season are favorable, and is equally sure to produce a sure crop and an abundance of Onions.

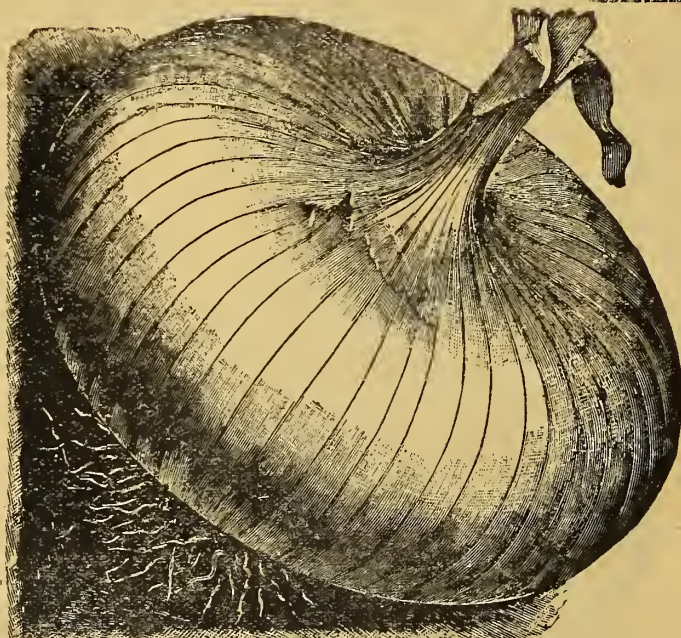
Culture Onions do best on a rich loam. Stiff clay and light sand are equally unfavorable. Drill 4 to 5 lbs. of seed per acre, $\frac{1}{2}$ inch deep. Onions are produced the first year from spring sown seed. Culture should be frequent, though shallow. Winter storage demands dryness and protection from sudden changes. Onions should never be handled while frozen.

The Standard
RED ONION
LEADING ALL OTHER VARIETIES



Always Commands
Attention
In the Markets

For general purposes, the country over, no variety is more largely grown. The largest, most uniform, heaviest yielder and the best keeping of all the red onions. This is a standard red variety. Large size; skin deep purplish red; form round, somewhat flattened; flesh purplish-white. We recommend it as a general cropper and a variety that will do well anywhere that large onions can be grown. One of the best keepers. Yields enormous crops. Our stock of Large Red Wethersfield Onion Seed is personally selected by us and excelled by none. PRICE: Pkt., 5c; oz, 15c; quarter lb. 45c; pound., \$1.50.



Ratekin's Mammoth Silver King.

Mammoth Silver King Of attractive form, flattened, but thick through bulbs, often attains weights of from 2 $\frac{1}{4}$ to 4 lbs. Skin and flesh white, mild and pleasant flavor; matures early of uniformly large size and always bring a good price in market. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.60.



Yellow Globe Danvers A handsome round or globe shape, of large size, with thin, yellow skin, white flesh, fine grained, mild, firm, and the best of keepers. Ripens early, sells readily at highest prices in markets. This is one of the best cropping varieties; has yielded 1,000 bu. per acre. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.50; 4 lbs., not prepaid, \$5.00.

Ratekin's Onion Seed

For table use large onions are much preferable to small ones and they bring a better price on the market. While they do not keep quite as well as some other kinds, still they are usually good till January or February.

Ratekin's Mammoth Prizetaker

(See cut No. 1)—One of the largest, handsomest, finest flavored, and in every way a choice variety of yellow onion, having been grown to enormous weight of over 6 lbs. Of a clear, bright straw color, and uniform, perfect globe shape. Produces enormous crops, one report being over 1,200 bu. per acre; bring an extra price, being sold on the market as fancy onions. Keep wonderfully well. Our seed is unexcelled, ripen up hard and firm, and present the handsomest possible appearance in market, while the pure white flesh is fine grained, mild and delicate in flavor. To grow largest size, sow early in hotbeds and transplant to open ground soon as weather is favorable. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 40c; lb., \$1.50.

Copper King or Mammoth Pompeii

(No. 2)—Have been grown to the enormous weight of 5 lbs., 6 oz., and notwithstanding their large size retain their shape and fine quality. To obtain an idea how large this really is, weigh the largest onion you can find and compare. Copper color, flesh white, fine grained, mild. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 40c; lb., \$1.50.

Ratekin's Mammoth Prize Taker.

Ratekin's Red Globe

My strain of this onion is of the very best. Globe Onions are the most popular varieties grown, and the Red Globe is planted heavier than any other variety. In the East this onion is called the Southport Red Globe and in other sections it is sold under different names, such as Ohio Red Globe, Minnesota Globe and Globe Red Wethersfield. I have bred up a variety superior to any other of the above named sorts, and to distinguish it from ordinary strains have named it Ratekin's Red Globe. It is a perfect globe, skin being of a rich, glossy red, flesh fine grained, and always mild and pleasant. Like my other globe varieties, it is a very hardy and a splendid keeper, and always commands top prices on the market. You make no mistake in planting this variety. **PRICE:** Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Ratekin's White Globe

On account of its handsome appearance this onion always brings top prices on all markets. It is a silvery white in color, globe shape in form, flesh of delicious flavor and a fine keeper. This onion is a very heavy yielder, but a very shy seeder, and therefore the seed is always high priced. **PRICE:** Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Ratekin's Yellow Globe

This is one of the same general character as the two varieties described above, except that the skin is of a rich, yellow color; flesh pure white and of a mild and delicious flavor. These three varieties of globe onions I have bred up for years, so I am sure that any of my friends who entrust their orders with me will be highly pleased with the results they obtain from their crop. All of my Globe Onions ripen evenly, are wonderful keepers and on this account should be planted more extensively. **PRICE:** Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Australian Brown Onion

Extra early, long keeping; the most valuable variety of medium size, wonderfully hard and solid, and most attractive, and when once bought purchaser will call again for those "beautiful brown onions." **PRICE:** Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

New White Queen

Small; noted for extreme earliness. **PRICE:** Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$2.00.

Chives

Perfectly hardy little perennials of the onion tribe, grown for their tops, used wherever flavor of onions is required. Plant in garden; they grow readily. **PRICE:** Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$2.00.

Roots, per bunch, 15c; three for 35c; doz., \$1.00.

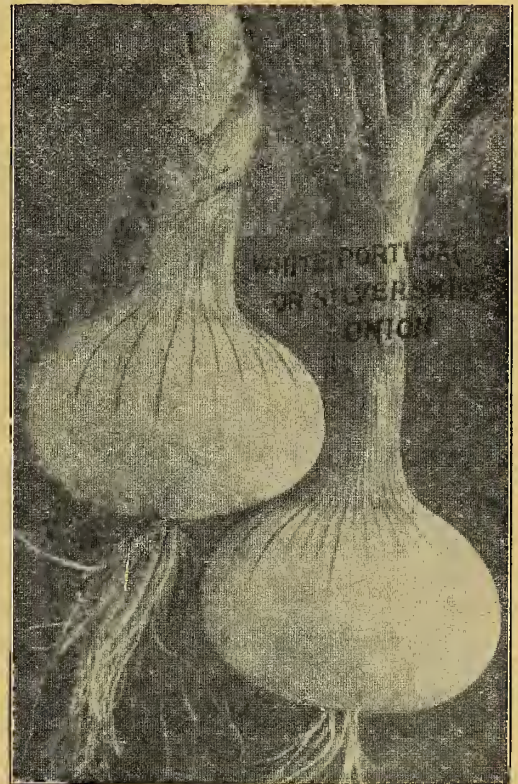
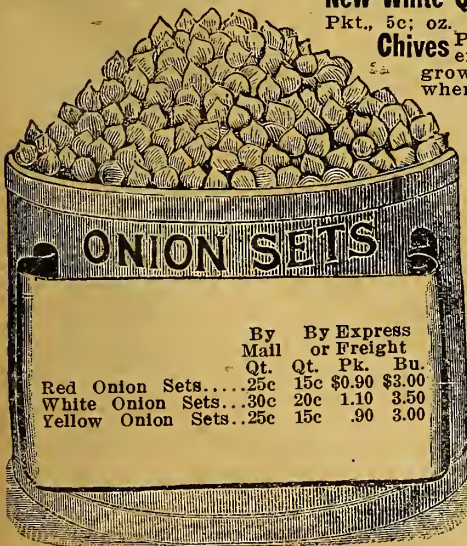
Onion Sets—Northern Grown

The planting of onion sets is increasing rapidly year after year. The bottom onion sets produce a large onion ready from 4 to 6 weeks earlier than can be had by sowing seed. This enables the grower to sell his crop earlier in the season, at which time prices usually are higher than when the bulk of the crop reaches market. Bottom sets also produce good green onions on any soil in half the time it takes to raise them from seed.

Bottom onion sets are produced by sowing seed very thickly, and are harvested before they have reached full development. Our sets are small, even in size, dry and unsprouted.

We grow our own onion sets, which enables us to produce hard, sound, clean sets of the best quality. It follows, therefore, that our northern grown sets will produce onions earlier than southern grown sets. In the spring of the year our sets are hard and sound, while at that time southern sets are often so dried and shriveled and so lifeless that they either grow slowly or fail entirely to make a bulb. We do not think it too much to say that a bushel of our sets will give twice the number of onions as will a bushel of ordinary sets.

About Prices As the value of onion seeds and sets fluctuates greatly our prices are subject to market changes. The prices named in this catalogue are based upon values existing at the time of publication, December 1st. If you wish to purchase round lots be sure to write us for lowest market values.



Chives, Garlic, Leek, allied with Onions, can be found in this Catalogue. See Index

Grow Okra or Gumba

A fashionable Southern vegetable, of easy growth at the North. The pods are used when young and tender for soups and stews.

CULTURE—Sow in May and June, in drills three feet apart, cover the seed with about 1 inch of soil, and thin to 12 to 18 inches apart in the rows. Use 1 ounce of seed to 100 feet of row; 8 pounds to an acre.

White Velvet Okra A standard variety for home use and local markets. We have a specially fine early strain of this variety. This strain we find to be the best of all the white varieties. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c, postpaid.

Kleckley's Favorite The pods average 6 inches in length by 1½ inches in diameter at the bottom, carrying the thickness well throughout the length. Plant grows 2½ to 3 ft. in height; smooth pods appear at leaf joints. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Perkin's Perfected Long Pod

Large okra, esteemed by gardeners. It is a great improvement on the old green podded sorts. Large, handsome. Fine quality, very productive, 4 to 5 ft. tall. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Parsnips **CULTURE**—Parsnips do the best in deep, rich, sandy soil, but will make good roots on any soil which is deep and mellow and moderately rich. As the seed is sometimes slow to germinate it should be sown as early as possible; cover one-half inch deep, and press the soil firmly over the seed; give frequent cultivation and thin the plants 6 inches to the foot. 1 oz. will sow 150 ft. of drill; 5 lbs. 1 acre.



Improved or Table Guernsey.

Improved Table Gurnsey A greatly improved and wonderfully fine strain of the Guernsey Hollow Crown Parsnip. The roots do not grow as long as the Hollow Crown, but are of greater diameter and more easily gathered. Very heavy cropper; roots are smooth with a deep, hollow crown and a small top. Flesh fine grained, sweet and of excellent quality; cooks evenly, center being as fine, soft, even quality as outside portions. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

Improved Half Long I consider this the best parsnip for general planting, market gardener or amateur. The root is smooth, and the flesh fine grained and of excellent flavor. It is a heavy cropper. Being larger in diameter and shorter than the Long Smooth, it is harvested with less labor. Excellent for stock as well as for the table. Pkt., 10c; oz., 15c; ¼ lb., 30c; lb., \$1.00.



Sugar or Sweet Pumpkin The pumpkin which the celebrated pumpkin pie is made; also first-class for baking. It is small, being from 10 to 12 inches in diameter, but its quality is of the finest. Most prolific and is not excelled as a table variety. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c. (See next page.)



Ratekin's Moss Curled Parsley.

Parsley **CULTURE**—Sow in spring and fall in drills 15 inches apart. Keep well stirred and free from weeds. When plants have become strong thin out to 6 inches apart. Parsley often requires from 3 to 5 weeks to germinate. Soak seed in water 12 hours before planting. Plant 1 ounce seed to 200 feet of row; 3 pounds per acre.

Extra Moss Curled Our fine strains of Extra Moss Curled is the most ornamental of all varieties. It is handsome enough to have a place in your flower garden. It is the favorite sort for garnishing and to supply hotels and markets. It is planted almost exclusively by market gardeners for that purpose. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Double Curled Plants of dwarf, compact growth, and the young leaves have the edges heavily crimped, giving it a general appearance of coarse moss. Used by market gardeners. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Plain Leaved Is very hardy, a strong grower, and excellent for seasoning, for which purpose it is grown almost exclusively. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.



Until recently it was thought that peanuts could be raised only in the South, but they are now raised as far north as Canada. In the last few years Peanuts have become very popular for dry land farming. They are classed with Dwarf Milo and Feterita in their ability to withstand dry weather, and made good returns in the dry summer of 1913.

The tops of the plants make good hay. The yield even in dry seasons is from one-half to three-quarters of a ton of hay and from 25 to 60 bushels of nuts per acre. The whole peanut plant makes nice feed for rapidly fattening cattle and hogs, especially when combined with grain. A common method of harvesting is to let the hogs gather the nuts.

Peanuts do best in light sandy loam. They should be planted in rows from 28 to 30 inches apart and from 9 to 16 inches apart in the row. They need not be shelled but should be soaked in warm water for a day or so and then planted at once in warm soil. Planting should not be done until weather is good and warm. They should be cultivated and kept clean until they begin to form pods. After that they should be left alone. It takes from one peck to a peck and a half shelled nuts and from a bushel to a bushel and a half in the shell to plant an acre.

Mammoth Early Virginia This very desirable variety is as early as the earliest, hardy, very prolific and of the best quality. Boys, here is a chance for you. Think of peanuts in your own garden and have plenty of them to eat. They produce twenty-five to sixty bushels per acre and are as easily cultivated as corn. Pkt., 10c; pt., 25c; qt., 40c; 2 qts., 75c, postpaid. Write for special price in large quantities.

Spanish Peanut A Splendid Early Variety. Pods small, but remarkably solid and well filled with nuts of very fine quality. The yield per acre is very large. Can be cultivated with the plow. Because of their early habit and easy cultivation, it is the best variety to grow for fattening hogs. Pkt., 5c; pt., 25c; qt., 40c, postpaid. If wanted in quantities write for prices.

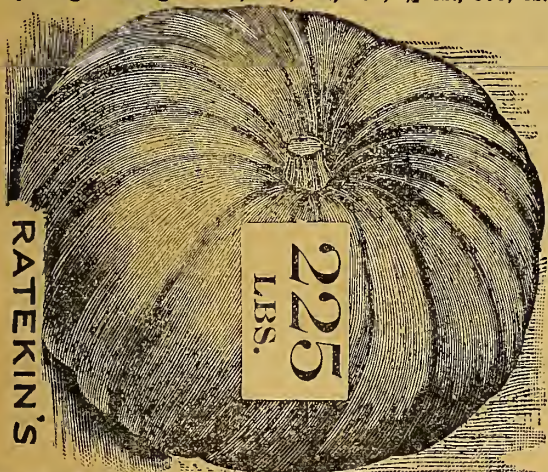


Ratekin's Mammoth Prize.

Weight 100 lbs., Ratekin's Mammoth Prize Taker Pumpkin.

Ratekin's Mammoth Prizetaker

Do you want to grow the biggest pumpkin in your county? If so, RATEKIN'S MAMMOTH PRIZE TAKER is the variety weighing from 100 to 125 pounds on unfertilized ground. It is nothing to grow them considering the size. Flesh is a bright golden yellow and fine grained. A good yielder and keeps well if handled carefully in gathering. Pkt., 10c; oz., 10c; ¼ lb., 30c; lb., \$1.00. Takes first prize everywhere.



Ratekin's King of the Mammoths

Wonderfully grand and colossal variety, astonishing everyone by its mammoth size and heavy weight. Think of it—a single Pumpkin weighing 469 pounds! Many of our customers saw this specimen on exhibition at the World's Fair. King of Mammoths is always a prize winner at fairs and exhibitions. Notwithstanding its enormous size, it is one of the best pie and table varieties grown. A splendid keeper, and exceptionally valuable for feeding purposes. PRICE: Choice stock seed, by mail, postpaid, oz., 5c; ¼ lb., 15c; ½ lb., 25c; lb., 40c. By express or freight, at buyer's expense, 5 lbs., \$1.60.

Japanese Pie

A crook neck variety. Early, fine quality. Keeps well. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 95c.

From 20 seeds Mammoth Tours Pumpkin I grew 40 pumpkins that weighed 4,000 lbs. and innumerable smaller ones.

JOHN C. JONES, Brown County, Texas.

Large Cheese Large, round, flattened fruits, with creamy buff skin. It is an excellent keeping variety, with thick flesh of exceptionally fine quality. Commonly called sweet pumpkin throughout the West. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Yankee Pie The noted New England Pie or Small Sugar Pumpkin, very sweet, fine grained and one of the best varieties for table use. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Pumpkin ONE OUNCE WILL PLANT TWENTY-FIVE HILLS. FOUR POUNDS WILL PLANT ONE ACRE. "Whale." Originated near Tours, France,



Mammoth Tours

Also called "Mammoth" where it is largely grown, both for feeding cattle and table use. Grown to an immense size, sometimes 3 feet in length, and to a weight of 100 to 200 lbs. Flesh of salmon color. Seed of a peculiar shape. Oz., 15c; ¼ lb., 35c; 1 lb., \$1.25.

Ratekin's Garden Peas Best Varieties



Ratekin's New Wonder.

American Wonder The most popular extra-early variety for the family garden; being very sweet, it cannot be planted early; on good soil each vine will average twelve pods. Pkt., 5c; $\frac{1}{2}$ lb., 15c; lb., 40c.



Nott's Excelsoir

A superb variety and we are sure our customers will welcome it as an ideal family and market pea. It is fully as sweet and delicious as the American Wonder, and grows one-half taller. Pods are larger and it is far more productive than the Premium Gem, and it is within a day or two as early as the first early smooth pea. The peas are ready for table use within forty-three days from planting. Quality very superior. PRICE: Pkt., 5c; $\frac{1}{2}$ lb., 15c; lb., 30c. By express:

EVERBEARING

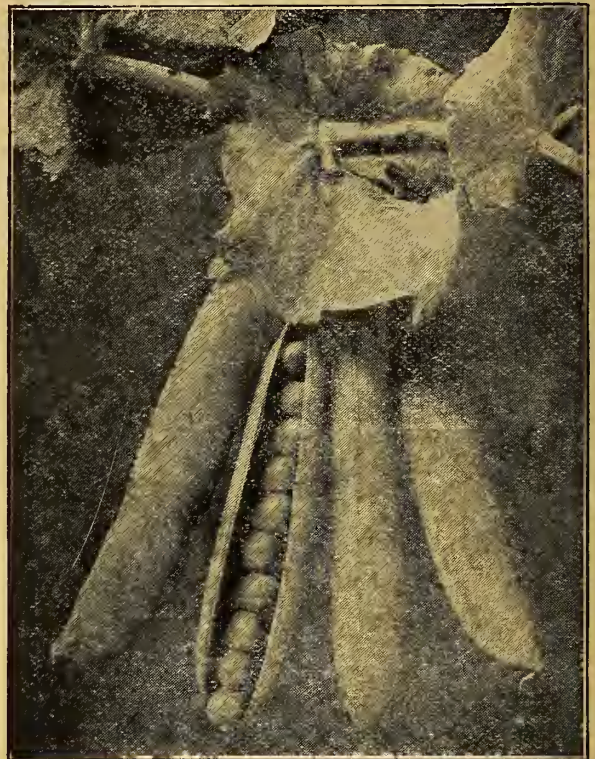
Height 2 feet; late to very late; hardy, large size and good quality. Pkt., 5c; $\frac{1}{2}$ lb., 15c; lb., 30c. By express: Half pk., \$1.00

One Quart Will Plant About 100 Feet of Drill. One and One-half to Two Bushels for an Acre.

CULTURE—Peas of extra early, smooth class are the very first thing to be planted in the spring. The wrinkled sorts follow a little later, as they are not quite so hardy. Tall late varieties need brush or other support. By selecting sorts that do not grow much over four feet high the necessity of providing brush may be avoided. Judicious selection of varieties for succession will give a full supply of choice green peas during the entire season. Open furrows three or four inches deep and three feet apart; scatter the seed peas into them and cover with hoe. Cultivate like corn or beans. Garden peas, however, require good, strong and fertile land.

NOTE—While our supply of peas is limited, owing to unfavorable growing conditions, yet we can supply the very best of quality. Owing to crop shortage we are unable to quote prices on large quantities in this catalogue, consequently would advise that our customers who intend planting quantities write us for lowest quotations before placing their orders.

Ratekin's New Wonder A round seeded hard shelled pea that can be sown when frost is barely out of the ground, before it is safe to sow wrinkled sorts. This, with its quickness of growth and maturity, renders it the **earliest pea on record**. Is unequalled for general excellence, size of pod and regularity of ripening. It grows $2\frac{1}{2}$ feet high and produces pods of good size; of splendid flavor. It is a very heavy yielder and in this last feature, with its extreme earliness, lies its great value to gardeners and truckers. It is one of the best for private garden. Pkt., 10c; $\frac{1}{2}$ lb., 20c; lb., 30c.



Gradus or Prosperity

WITHOUT A RIVAL FOR TABLE QUALITY.

An Extra Early Wrinkled Pea, hardy, early and very profitable. This remarkable Pea has now been on the market 10 years, and has grown in popular favor until today it is the most widely known variety in cultivation. The secret is that it produces a **TELEPHONE POD** as early as Alaska. Then, too, its quality is of the highest order—fully equal to the finest late wrinkled marrow grown. The vine is of vigorous growth, about 30 inches in height. The pods are borne abundantly, large and fine and most luscious quality. For the home garden it is perfectly adapted. For the market gardener it is the most profitable on account of the earliness combined with size of pod. Pkt., 5c; $\frac{1}{2}$ lb., 20c; lb., 35c.

Alaska Height two feet, pods rather small, dark green color, well filled, the earliest pea known, being earlier than the Rural New Yorker, and 70 per cent of the pods can be gathered at the first picking. PRICE: Pkt., 5c; $\frac{1}{2}$ lb., 10c; lb., 25c.

Peas—Choice Grown Stocks—Continued

Improved Stratagem The most popular late variety for market or family use. It is preferred because of the immense size of pods and peas and the exceptional sweetness and tenderness of the peas when ready to use. Does not grow very tall, being really a half dwarf sort two to three feet high, and does not require support, though it will repay for the labor of training up with greater yield and longer bearing season. It is a vigorous grower of branching habit, and under favorable conditions an enormous cropper. Pods are large, long, and filled with seven to nine large peas of superior quality. **PRICE:** Pkt., 5c; ¼ lb., 10c; lb., 30c; 3 lbs., 80c. By express, ½ pk., \$1.25.

Mammoth Luscious Sugar This new sugar pea bears pods much larger than any other variety, often six to seven inches long and an inch and one-half broad. They should not be shelled, but the peas and pods eaten together, as they contain so much sugar, starch and gluten; are very nutritious for family use. Grows quite tall, five to six feet high, and requires support. Most decidedly a desirable variety. Pkt., 10c; ¼ lb., 15c; lb., 40c; 3 lbs., \$1.10. By express, ½ pk., \$2.00.

Dwarf White Marrow An improvement on the Large White Marrowfat. Fully as productive as the older sort, but does not grow so tall. Is used almost exclusively for late midsummer planting and is very productive. Grows three to four feet and is best if supported, though support is not usually given where it is grown by gardeners in quantity. Pkt., 5c; ¼ lb., 10c; lb., 25c; 3 lbs., 65c. By express, ½ pk., \$1.00.

First and Best A standard first early variety; popular with gardeners in all parts of the country. This variety is perhaps more largely grown by market gardeners for first early than any other. Crop is very short this year. Pkt., 5c; ¼ lb., 15c; lb., 30c. By express, ½ pk., \$1.10.

Premium Gem Height one foot; early and prolific; an improvement on the McLean Little Gem; pods long and of dark green color. The most popular sort for family use. Pkt., 5c; ¼ lb., 15c; lb., 30c. By express: Half pk., \$1.50.

Telephone Immensely productive, of the finest quality and excellent sugary flavor; vines very strong, the pods are of large size; height four feet. Pkt., 5c; ¼ lb., 15c; lb., 30c. By express, ½ pk., \$1.25.

Bliss Everbearing Height two feet; late to very late, hardy, enormous cropper; pods and peas large size and good quality. Pkt., 5c; ¼ lb., 15c; lb., 25c; ½ pk., \$1.25.

Tom Thumb This variety was introduced years ago. Vine bushy, growing to a height of ten feet; foliage heavy; productive; matures in thirty-five days after sprouting. Half lb., 15c; lb., 25c; ½ pk., \$1.25.

Field Peas See list of Miscellaneous Field Seeds. Cow Pease, Soy Beans, Vetch, Alfalfa, Clover, and other legume plants. Seeds that crave NITRAGIN as an inoculator. But what is NITRAGIN? "Nitrugin" is simply bacteria or germs packed in a suitable food to keep them alive until they reach the farmer's soil. Breeding fine strains of bacteria is like breeding fine cattle or hogs and shipping them* to market, only the bacteria or germs are so small that there are about 50,000 of them to the inch.

The bacteria live on the roots of legumes or (Pod Bearing) crops, such as alfalfa, clover, peas, beans, vetch, lupins, etc.

"Nitrugin" germs through legumes take nitrogen from the air and turn it into plant food, making the plants healthier, hardier, deeper rooted, quicker of growth and give them greater food value by adding protein to the plants.

These bacteria therefore build up worn out land and maintain soil fertility.

Simply moisten your seeds with the "Nitrugin." Thousands of the bacteria cling to each seed. The seeds are spread out to dry and when dry enough to handle are planted in the usual manner, the bacteria going into the soil with the seeds. The method is simple and cheap—the logical, common-sense way to inoculate legumes.

This "Nitrugin" way is endorsed, recommended and encouraged everywhere by the highest authorities.

"Nitrugin" meets the great agricultural need of the hour—greater soil fertility.

Rhubarb, or Pie Plant **CULTURE**—Sow the seed in cold frame in the spring and as soon as the plants are large enough transplant into rows five feet apart each way, and each spring work into the soil a liberal supply of decomposed stable manure. One ounce of seed will sow 75 feet of row.

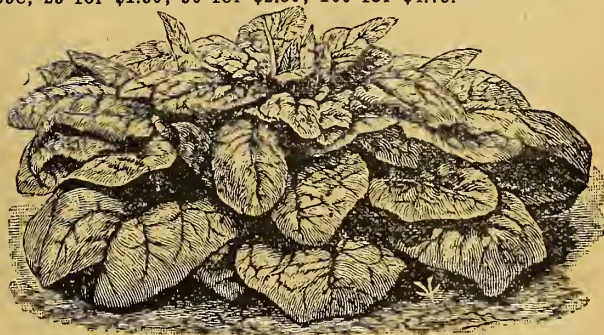
Rhubarb Roots Rhubarb roots are set out and cultivated as the above, and this method gives edible rhubarb in a very short time. Rhubarb is vigorous and productive. The leaf stalks are very numerous, the longer ones being from 15 to 20 inches in length, and fully one and a half inches wide. The whole plant is nearly 5½ feet in diameter, while the leaves, exclusive of the flower stalks, are about 2½ feet in height. Rhubarb is very highly esteemed for use in pies, tarts, jelly and marmalade, and large quantities are sold in all markets every year. It is the first vegetable of the season, and no garden should be without it. Large Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25. Roots, 15c each; 4 for 50c; 12 for \$1.25, postpaid. Not, prepaid, 10c each; 10 for 65c; 25 for \$1.50; 50 for \$2.50; 100 for \$4.75.

Culture For early Spring use, sow seed in August or September, in rich soil. Upon approach of cold weather, cover the plants with 3 in. of straw or salt hay. In the Spring, when dry, remove the litter and plants will be ready for use in a short time.



Victoria Rhubarb.

Spinach. Long Season This is a whole-some vegetable throughout the entire season. It is very hardy. Seed sown in September will produce small plants, which, with a slight covering will be available for use very early in the spring. The plant is small, with very rich, lustrous green leaves. These are short, broad, very thick, and of so great substance, that it loses bulk in cooking less than any other sorts. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.



Long Season Spinach.

Peppers **CULTURE**—Pepper seed will not germinate freely in a temperature of less than 65 degrees. This necessitates sowing seeds in hotbeds or boxes placed in warm, sunny situations from January 1st to April 1st in most parts. When plants have six leaves transplant to other beds or boxes till all danger of frost is past and the soil is warm, when they may be set in the open in rows 3 feet apart and 14 to 16 inches apart in a row. As they begin to bear draw the earth up around the stems. One ounce of seed makes about 1,000 plants.

Large Bell or Bull Nose The standard large size, sweet flavored variety both for home use, market and shipping. It is sweet and has a very mild flavor; is early and very prolific. Fruits 3 to 3½ inches long and 2 to 3 inches across the shoulder. Pkt., 5c; ½ oz., 15c; oz., 25c; ¼ lb., 60c; lb., \$1.75.

Chinese Giant The monster of the pepper family. Single specimens of Chinese Giant have been grown weighing 18 ounces. The plants are of strong, stocky, bushy and erect growth; growing 2 feet high, and are very prolific, setting extra large fruits. Fruit is much larger than Ruby King, almost square in shape, while the flesh is very thick. In flavor it is very mild and entirely free from any fiery taste. Pkt., 10c; ½ oz., 30c; oz., 50c; ¼ lb., \$1.40; lb., \$5.00.

Red Cayenne PRICE: Per pkt., 5c; oz., 25c; ¼ lb., 90c.

Prize Collection, Only 40c

- | | |
|---|-----|
| 1 packet Rockyford, "GEM OF EDEN" Cantaloupe..... | 15c |
| 1 packet Ratekin's "NEW NATIONAL" Watermelon.... | 15c |
| 1 packet Ratekin's "20-DAY WHITE RADISH"..... | 15c |
| 1 packet "MAGIC QUEEN" Tomato..... | 15c |

All for FORTY CENTS, postpaid.

60c



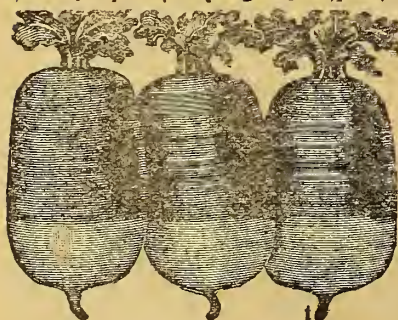
Large Bell or Bull Nose Pepper.

Ratekin's Select Radish Seed

Ratekin's 20 Day White Radish First and Best of All. If you want to grow the VERY EARLIEST and BEST of ALL this is what you want and the variety to do it with. It certainly IS A GEM and is valuable for forcing and especially adapted for growing in hotbed or to sow very early in the open ground. It will supply your table with nice white crisp Radishes ten days to two weeks before any of your neighbors have a taste of "garden stuff." It is twice as long as your finger, as white as snow and as crisp and briclike as an icicle and will produce fine radishes fit to pull in twenty days from the time you plant the seed, if the ground is anything like warm. We are pleased beyond expression to have obtained the entire stock of seed of this new introduction, for our exclusive trade and our customers. The supply of seed, however, is very limited this year, but a small quantity of this seed will grow you a good supply for your table and a world of seed for yourself and all your neighbors for another year. By all means include some of this seed in your garden seed order. Pkt., 15c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

Another 20 Day Radish

If you want to grow the very Earliest **Scarlet Turnip Radish**, this is what you want. It certainly is a little gem and is very valuable for forcing and especially adapted for growing in hotbeds or to sow very early in the open ground. It is very crisp and tender, and will produce radishes fit to pull 16 days after sowing the seed. We are pleased to be able to offer our customers such a splendid early radish and we know it will be highly prized wherever grown. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.



French Breakfast Radish

French Breakfast

Of medium size and olive shaped, with small top; quick growth; beautiful scarlet color shading to white. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Early Long Scarlet Short Top An old standard variety of quick growth, with long, slender roots. Radishes are ready for market about twenty-five or thirty days after planting seed; fresh, crisp and mild. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

White Lady Finger An improvement on "White Nipples," or "Vientna." Large, white crisp variety, about as large as "Long Scarlet" and similarly in shape. A very desirable sort. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.



16-Day Radish

Scarlet Turnip, White Tip

Handsome bright scarlet, white tip. Many gardeners make sowing of it every two weeks during summer; its fine appearance attracts customers; quality always pleases. PRICE: Packet 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Ratekin's Select Radish Seed—Continued

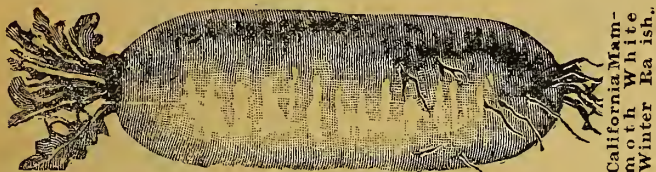


Striped Triumph Radish.

Striped Triumph A beautiful new variety and is a decided novelty. It is striped white scarlet, being decidedly ornamental when placed on the table. It is very early and has a very small top, thus adapting it to cultivation in hotbeds. The flesh is white, crisp, tender and as good flavor as any radish grown. It being a sport, some of the roots are always of solid color, not variegated, but they are always of fine quality, regardless of color. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Earliest Scarlet Radish

The earliest of all. Of handsome color, crisp, juicy and tender. It forms a small top and will stand a great amount of heat without becoming pithy. Its fine shape, well illustrated by the accompanying engraving, makes it sell for a higher price and more readily than any other sort. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 85c.



California Mammoth White Winter.

The merits of Winter Radishes are little appreciated, because few people have knowledge of their worth. These grow to large size and keep well for winter use. Sow seed in the middle of June. Include some of these in your order.

California Mammoth White Pure white, about one foot long and two or three inches through; flesh tender and crisp, keeping well through the winter. Large pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

China Rose Bright rose color, flesh firm and piquant. One of the best for winter use. Large pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c.

Radish Culture One ounce will sow 100 feet of drill. 8 to 10 lbs. will sow an acre in drill.

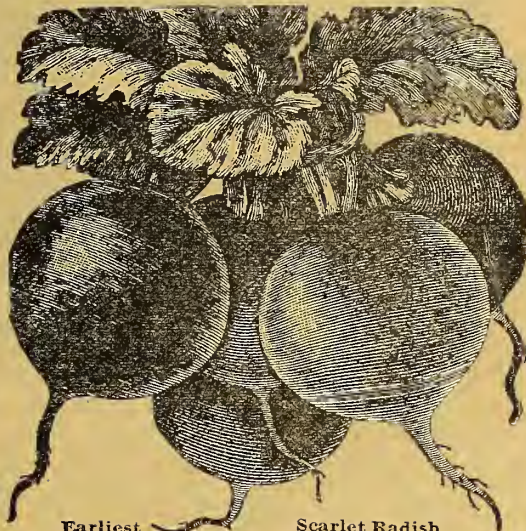
Radish seed should be sown in light, rich soil as early as the ground can be worked, and for a succession, at intervals of two weeks, until midsummer. Radishes must be grown quickly and have plenty of room or they will invariably be tough and pithy. Sow in drills one foot apart and thin to two or three inches apart as soon as the rough leaves appear. Most of our radish seed was grown for us in France, "the natural home of radishes," and we think it cannot be surpassed.

Improved Chartier Radish. Plant Liberally of This.

Is distinct from any radish in cultivation. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

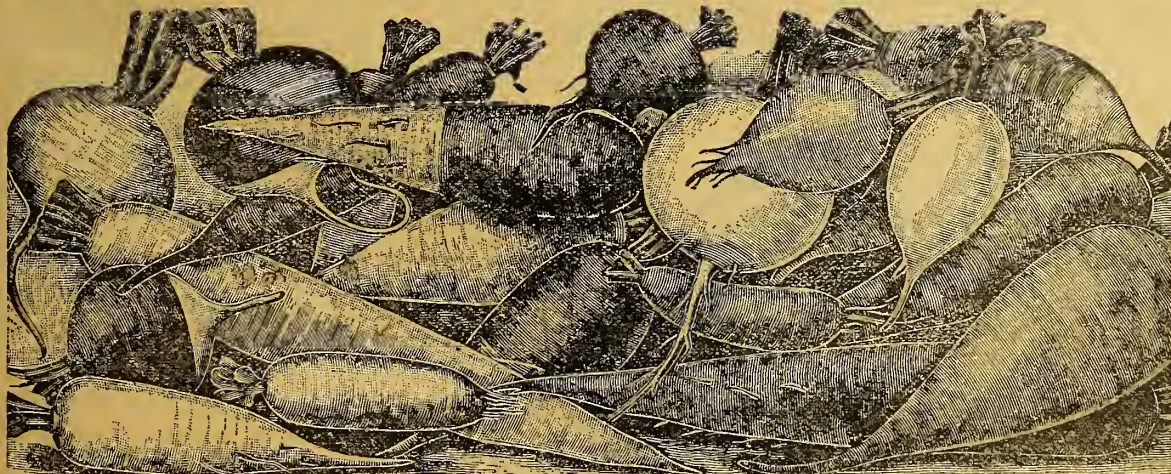


Improved Chartier.

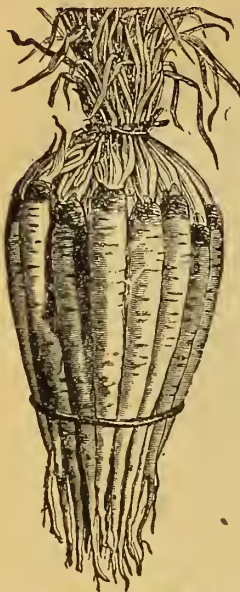


Earliest

Scarlet Radish



All Seasons Radish Mixture The best mixture of radishes ever offered; contains all shapes, sizes and colors. A supply of this seed will be just the thing for small gardens when space is limited. By sowing seed of this mixture you will have radishes very early and continue throughout the season, having all the leading early, medium and late sorts. We are sure this mixture will please you. Plant it. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 20c; lb., 60c.



Mammoth Sandwich.

Winter Squashes

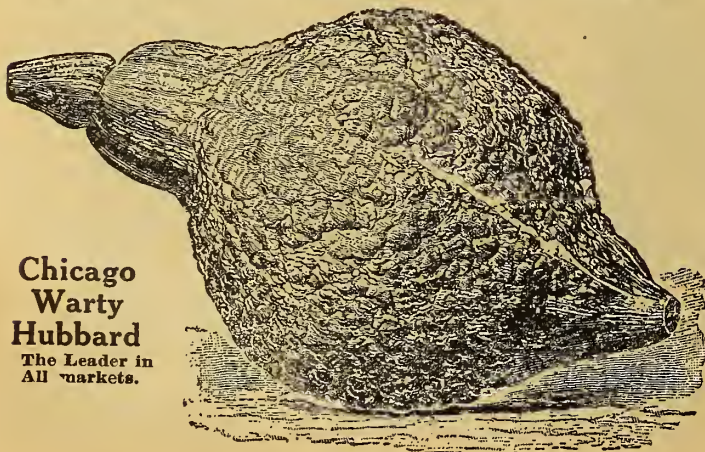
The acknowledged
Standard for
Quality

More people in more places plant the Hubbard Squash than any other sort; it is the American favorite. It outsells all other varieties in markets. It reaches perfection almost everywhere, from ocean to ocean, and from Canada to the gulf. While the average strain is good there are differences in the Hubbard type which should be recognized by progressive gardeners. Our improved Hubbard represents the perfection of the type. The flesh is of a rich yellow or orange color, and is very fine grained, solid, dry and sweet. The toughness of the rind or shell makes it a good keeper. The color varies somewhat, being sometimes green and sometimes reddish when mature; but the color and quality of the flesh are fixed and unchangeable—always a deep golden yellow or orange.

The One Variety of Squash that is Never Troubled by Bugs. Justly Popular Wherever and Whenever Grown. This is a True Hubbard Squash, Except in Color, which is Bright Golden. It ripens its crop very early. The fruits are very uniform in size, weighing from six to eight pounds, and in shape are like the Hubbard. Though maturing early they are long keepers, can be held over in good condition for Spring use. The shell is warty, hard and strong, and a very beautiful orange-red color. The flesh is a deep orange, cooks very dry, fine grained and good flavored. Has no superior as a table Squash. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 55c; lb., \$1.00.

Ratekin's Chicago Warty Hubbard

forty years this squash has ranked first for a winter keeper. It is shipped thousands of miles in carload lots from the West to East every year. With the growing of it in a large way rough-skinned specimens are most valuable and most salable.



Chicago
Warty
Hubbard
The Leader in
All Markets.

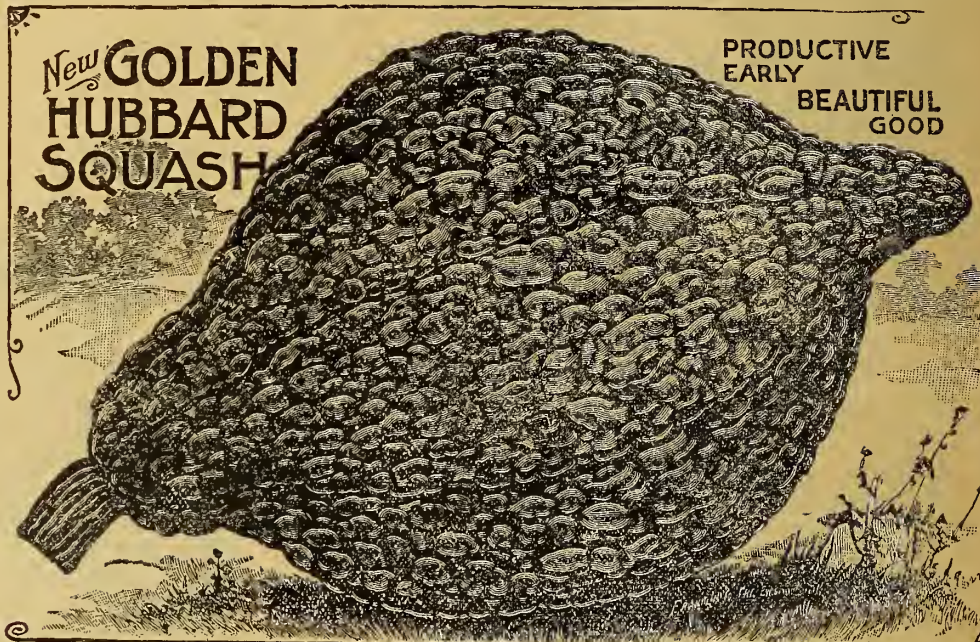
Salsify or Vegetable Oyster

CULTURE—Also known as Oyster Plant or Vegetable Oyster. Treat about the same as carrot, except that salsify is hardier, and may be left in the ground all winter. Sow in drills a convenient distance, 1 to 2 feet apart, and thin to 4 inches in the row. Cover seed about 1 inch. Use 1 ounce to 75 feet of row; 8 to 10 pounds per acre. Sow in April or May.

Mammoth Sandwich Island This is an improved type and the largest and most prolific salsify now in cultivation. It attains large size, being twice the size of the Long White. In quality it is much superior to the other sorts. **PRICE:** Pkt., 10c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Horse-Radish Roots or Sets

Horseradish is always in demand in winter and spring. The culture is by sets or root cuttings as it seldom seeds. These sets are planted in rows or furrows 2 to 3 feet apart and 15 to 18 inches apart in the rows. The sets should be placed in a perpendicular position, with crown 3 to 6 inches below surface. Horse-radish delights in a deep, rich soil. It makes large top growth, giving weeds small chance. The **COMMON VARIETY**—very choice—we offer at 25c per dozen. 50 for 60c; 100 for \$1.00, postpaid by mail. By freight or express at purchaser's expense 60c per 100; \$5.00 per 1,000.



New GOLDEN
HUBBARD
SQUASH

PRODUCTIVE
EARLY
BEAUTIFUL
GOOD

Our strain of the Chicago Warty Hubbard we consider the Ideal Hubbard for home or for market. For shipped thousands of miles in carload lots from the West to East every year. With the growing of it in a large way rough-skinned specimens are most valuable and most salable. **Choicest stock Seed of our own growing. Send to Ratekin's Seed House for the best seed. Pkt., 5c; oz., 10c; ¼ lb., 25c; ½ lb., 45c; lb., 85c.**

Ratekin's Improved Hubbard

The Famous Standard Winter Squash for All Purposes.

The Favorite. This is a superior selection of this famous variety, and one of the best Winter Squashes. Flesh bright orange yellow, fine grained, very dry, sweet and rich flavored. Keeps perfectly throughout the Winter. Boils or bakes exceedingly dry, and is esteemed by many to be as good baked as a Sweet Potato. Pkt., 5c; oz., 10c; ¼ lb., 25c; ½ lb., 45c; lb., 85c.

Early White Bush Scalloped. This is the white Patty Pan or "Cymling" of the South. The plants are of true bush growth, producing fruit ready for use very early in the summer. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c, postpaid.

Burpee's Fordhook "Bush growth." Plants can be grown closely together. Fordhook is a week later than the Early White Bush; is much sweeter and better flavored. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25, postpaid.

The Largest
of All

Ponderosa
Tomato



HENDERSON'S RED PONDEROSA THE GRANDEST TOMATO ON EARTH

Ponderosa From its first appearance ten years ago it gripped and held the admiration of all who grew it. This has made it possible not only to maintain the high standard of quality which it has always occupied, but by careful development to raise it to a higher standard of perfection than ever.

Unquestionably the one great requisite in a vegetable for private use is quality—first and always **QUALITY**. With a Tomato this means primarily good flavor, free from acidity; then a fairly tender skin, solid, meaty flesh, few seeds, and very little juicy pulp. These ideals are perfectly exemplified in Ponderosa: Ponderosa in size or delicious, meaty flavor is not only the largest but also the heaviest tomato grown. The color is a glowing crimson; shape quite regular considering its size, and it is considered by thousands of people the best table variety in existence for slicing, having but few seeds. The fruit ripens early and bears well until very late. A good tomato for home use. I offer the genuine headquarters stock. **PRICE:** Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.10; lb., \$4.00.

Tomatoes One ounce produces about 2,000 plants; 2 ounces enough for an acre. For early crop sow in hotbeds in January or February. For late crop in open beds in May. Do not depend on one planting of tomato plants to extend the whole season through, as they with market gardeners, Southern growers, canners and Tomato as a field crop yields 300 to 500 bushels per acre.

CULTURE: Sow in a hotbed in early spring, or the seed may be sown in shallow boxes and placed in a window when one does not wish to have the trouble of making a hotbed. Transplant in the open ground when all danger of frost is past, setting the plants four to five feet apart each way.

New Stone—The Genuine Livingston Strain This is the most popular main crop variety in cultivation and there is probably more seed sold of this sort than all others combined under the **Ideal Tomato Conditions of "famous" Iowa**. We have brought this tomato to a very high state of perfection, so that our seed is not surpassed in quality by any stock offered. This variety has obtained immense popularity with market gardeners, Southern growers, canners and home growers everywhere. Its solidity and carrying qualities are remarkable. Its color is a desirable red. Its shape a perfectly smooth, and thicker from stem to blossom end than most varieties, making it very handsome and salable. Nobody finds any fault with this variety, but all speak in the highest terms of its beautiful color, its wonderful yielding qualities, its unequal firmness, or some other of its good points. **PRICE:** By mail postpaid: Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00. Not prepaid: ¼ lb., 60c; lb., \$1.90.

YOU WILL GROW GOOD TOMATOES

If you plant Ratekin's Tomato Seed. It is just as easy to grow good tomatoes as it is small, inferior, mis-shapen, cracked, split, almost worthless ones, grown from cheap seed; usually the refuse from canneries or saved from tail-end of the market gardeners crop.

Our tomato seed is saved exclusively from crops grown for seed purposes and only from the choicest tomatoes in the fields. We will not attempt to compete in price with seed dealers who sell canning factory seed or who buy up tomato seed from the refuse of market gardeners crops and other truck-growing States.

Ratekin's tomato seed has a reputation equaled by that of no other house in this country. It leads all others in the tomato shipping sections of the **SOUTH**. Our seed stands the test of time. It's not a case of good one year and poor the next, but it's good all the time. Makes paying crops for the men who grow tomatoes for shipment in the South; makes paying crops for local market gardeners; it gives home gardens a bountiful supply of delicious, large sized, smooth tomatoes, all through the summer; it's exactly the seed you want for your use this year, no matter whether you garden for market or home use.

RATEKIN'S

GRANDEST OF ALL TOMATO

"MAGI QUEEN"

This new variety entirely distinct



ITS ALL IN THE SEED

**MAGI QUEEN TOMATO**

Ratekin's Magi Queen Tomato Earliest of All

Combines the earliness of Earliana with the beauty and flavor of Stone and the solidity of Ponderosa.

The Earliest, Firm, Solid, Thick Fleshed Tomato Grown

We first introduced and catalogued this **GRANDEST OF ALL TOMATO** in 1912, under the head of "RATEKIN'S NAMELESS TOMATO" in which we said then as now, verified by more than fifty thousand gardeners, truck growers and housewives who have since tried and tested it, as follows:

A first early tomato introduced by us that will displace all other varieties for earliness, size, color, shape and solidity; equal alike for either home or market use and canning purposes. This being our (the introducer's) first season, we want each and every one of our customers to try out at least one packet.

We have tested it carefully in all sections of the country before offering it to the trade, from New Jersey to Oregon, from Minnesota to Texas, in fact, every section of the country where tomatoes are grown, and have proven conclusively to our satisfaction that it is **THE VERY BEST EARLY TOMATO GROWN**. The fruits ripen up evenly and set more freely than Earliana, also they command a higher price on the market on account of their color, size and shape. In the northwest they are sure to set their fruit, are abundant bearers and have proven themselves practically free from the terrible blight which affects all other varieties in that section.

In the south the "Magi Queen" has proven a winner. It ripens for first early market, keeps well, is a good shipper, but best of all, "Magi Queen" withstands the hot, dry winds, is free from the rot and blight which southern gardeners are always fighting.

SIZED UP FROM EVERY STANDPOINT, IT IS THE BEST ALL PURPOSE TOMATO I HAVE EVER SEEN. The **MAGI QUEEN TOMATO**: Grand and glorious tomato; the largest, handsomest, finest flavored, most superior early tomato ever offered or introduced. It's a healthy, thrifty, rapid growing tomato, one that never blights, rots or spots. The plants are very compact, with stout, close jointed branches, which set fruit very freely. The fruits are good size and very beautiful; brilliant scarlet color, smooth, sweet and juicy, yet the flesh is solid, almost "beefy," contains but few seeds and with very small core. It is everbearing from two months after it is transplanted until frost, and has proven the best and sweetest of all for slicing and for all purposes. **PRICE: Pkt., 15c; oz., 50c; ¼ lb., \$1.50; ½ lb., \$2.25; 1 lb., \$4.00.**

Tomatoes—Continued



Ratekin's Mammoth Beauty

Ratekin's Beauty THE BEST MAIN CROP TOMATO. Smooth, uniform, prolific, a long keeper and of the finest quality. Fruit is a glossy crimson, large size and so perfect and uniform that they look as though each one were molded with a stamp. On account of its perfect shape and great beauty it is unsurpassed for market. Its quality is excellent, flesh solid, beefy and with very few seeds. Ripens up after the first earlies and continues to bear until frost. A splendid keeper; ripe fruit fresh from the vine have been kept in perfect condition from 3 to 4 weeks during the warm summer weather. Planted together side by side with our new tomato, **MAGI QUEEN**, you will have two of the most profitable tomatoes to be grown and can cater to the most critical of markets, thereby gaining highest prices. Pkt., 10c; 3 pkts., 25c; oz., 40c; ¼ lb., 90c; lb., \$3.00.

Spark's Earliana

(Scarlet red.) Very popular with many growers of tomatoes for early market. There is no question but that Earliana is a very early variety, and one fully deserving the remarkable newspaper notoriety it has had for the past few years. As far as I am personally concerned I am satisfied Ratekin's **MAGI QUEEN** is still the earliest of all tomatoes. But at the same time I am willing to admit that Spark's Earliana is also an excellent variety, and that it has given Ratekin's **MAGI QUEEN**, a harder tussle for supremacy than any early variety. Of large size, scarlet red color and great productiveness. I have secured a supply of seed direct from headquarters. **PRICE:** Pkt., 10c; oz., 30c; ¼ lb., 85c; lb., \$3.00.

For 25c

We will send, post-paid, seven 5c packets of any variety of our tomatoes you may select, value 35c, for 25c.

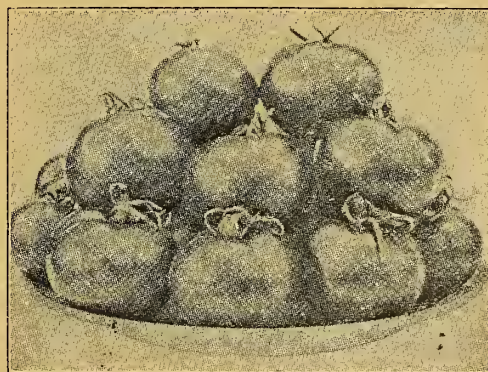


Dwarf Champion Tomato.

Dwarf Champion Dwarf and compact in habit; sold by some seedsmen as the Tree Tomato. Stands up well, even when loaded with fruit, having a stiff, bushy stem; can be planted close together; very desirable in small gardens; early. It is always smooth and attractive; the skin is tough and flesh solid, but has no hard core and is of good flavor. **PRICE:** Pkt., 5c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

Chalk's Early Jewel The largest, smoothest and finest flavored, extra early, bright red tomato. About ten days later than **MAGI QUEEN**. It is a heavy cropper, with tomatoes of large size and sweet flavor, producing throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are of good size, just right for market; are very solid and deep through, being almost round; color bright scarlet, ripening to the stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds. The skin is strong enough to make it a good shipping variety. **PRICE:** Pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

Mixed Tomatoes For the advantage of some of our customers who would like to try all kinds, we have prepared this mixture of the varieties named and several others which we think will please all. **PRICE:** Pkt., 5c; oz., 30c; ¼ lb., 85c.



SMALL FRUITED TOMATOES

Husk Tomato

Makes Fine Preserves. This useful fruit, which is also called Strawberry and Ground Cherry Tomato, is greatly valued for use as a preserve; it also makes delicious pies either when ripe or dried with sugar. When ripe the fruits are half an inch in diameter and of very sweet and agreeable flavor. The vines cover the ground and yield enormously of the fruit, which is enclosed in a husk or fruit calyx. There are two varieties of the Husk Tomato, the Golden Husk and the Purple Husk. We consider the Golden Husk by far the better of the two and unless otherwise directed will always send Golden Husk on orders received for Strawberry, Ground Cherry or Husk Tomato. **PRICE:** Pkt., 5c; oz., 30c; ¼ lb., \$1.00.

The Kind of Letters We Like to Receive From Our Customers

It's impossible to print all or any considerable part of the pleasing letters and testimonials we receive from our friends and customers. They are, however, all of them welcome and highly appreciated, but to print all would require a book many times larger than this catalog to hold them. This, however, does not disbar anyone from writing us at any time when they have something good they wish to share with us. In fact we would be pleased to receive letters from our entire family of customers, giving us their experience with crops grown from seeds they obtained from us, regardless of where you may be located. In addition to this we want you to write us at any time when we can in any way be of service to you in selecting your seeds. We are here to serve our farmer friends and truck growers in every way we can, whether you are one of our customers or not. But really we want you to become one if you are not already one.

This is a home-made catalog, written on the farm, and much of it in the field and at least intended to be helpful to the farmer and truck grower in the selection of his seeds and the growing of his crops. In short, a book in the interest of Better and More Profitable Farming.

Olyphant, Pa., Feb. 20th.
Gentlemen: Enclosed find my order with \$10.00 for seeds named in the same. I have been purchasing from another leading seed house for the past 28 years, but in some way, by accident or otherwise, I sent to you for a small order of grass seed and it came all right. I planted it on an old hill so steep that Washington could never have climbed it, but it came through all right, and it now looks as green as the border of a rainbow. I would advise you to look up that prescription and mix up some of this seed, because you are going to get several orders from here this year for some of the same kind.

Very truly yours, C. T. MARTIN.

McDowell, Mo., March 5th.
Gentlemen: The seed I got from you last year done fine, and gave good results. I am herewith enclosing my order for seed for the coming year. I want a few bushels of German Millet a little later on. I want it to be the purest, cleanest grade you have.

Very truly yours, R. L. WYMAN.

Black Springs, Ark., Aug. 19th.
Gentlemen: Find enclosed check for 10 lbs. of your best Kentucky Blue Grass seed. The different seeds which I have been buying of you for years have always proven to be true to name, pure, and high grade and up to date. Am well satisfied with our dealings with you.

Very respectfully, B. GROSS.

Savannah, N. Y., March 5.
Please send me your latest price list on clover and timothy seed. I bought my seed from you last year and found them to be A No. 1 and was well pleased with them.

Very truly, SARAH C. RECTOR.

Lackawanna Co., Pa., Aug. 14th.
I am writing to know if prices on grass seeds have changed since you issued your 1912 catalogue. I want a good lot of grass seeds this fall and have always got good seeds from you. In fact, I now have the finest piece of grass and pasture from the seed I sent to you for, that I have ever grown. Let me hear from you by return mail, as I want to sow the last of this or first of next month.

Truly yours, JOHN J. SCHMIDT.

Greenwood, Ind., Feb. 6th.
The alfalfa I bought from you last year proved all right. I sowed it and got as fine a stand as you ever saw; it was the talk of the neighborhood. Have you good seed on hand at the present time? And I would thank you to advise me where it was grown, and if under natural conditions and what it is worth per bushel. I want the dry land grown seed.

Truly yours, S. MINOR TILSON.

Atkins, Ark., Feb. 11th, 1915.
Gentlemen: Received my order and want to say that they are as fine looking seeds as I ever saw. Please send me some information about Billion Dollar Grass. You will receive my order soon.

C. D. UNDERWOOD.

St. Genevieve, Mo., May 9, 1915.
Dear Sirs: Please find enclosed money order, for which send me at your earliest convenience \$5.00 worth of your famous Billion Dollar Grass. I was well pleased with the corn I bought of you.

W. M. ZIEGLER.

Okeene, Okla., Dec. 19, 1915.
Ratekin's Seed House: As publisher of the Okeene Eagle, I receive many new varieties of farm seeds from seed houses and the Agricultural Department at Washington for distribution among the farmers. Last year I received some Sudan Grass seed, and I feel very proud of the results from this new and wonderful grass. A much smaller sample plant than could have been sent, went to the Dry Farming Congress at Wichita and took second premium, but there were several plants placed on exhibition in this town that would have easily taken first winners. Nothing ever introduced as a fodder crop can touch it. It will succeed without one sprinkle of rain if the soil has moisture enough to sprout the seed. It produces from 50 to 200 stalks to a single seed root, as found among the crops grown from the seed I got from Washington, and I hope you will advertise it, if you can get the seed.

Very truly yours, H. C. CHAPMAN Editor Eagle.

White Pigeon, Mich., Aug. 11th, 1915.
I am greatly pleased with results from the Early Rose seed potatoes I received from you last spring, and shall want enough seed of the same kind, Red River grown, to plant 15 acres another year.

CHARLES W. WALTERS.

Hopkinton, Iowa, March 3, 1915.
Dear Sir: Enclosed find my order for potatoes. I want some of Ratekin's Earliest potatoes. I think they are the best potatoes that grow. I have some of the kind I got of you a few years ago, but would like to change the seed.

Yours truly,
P. C. BLANCHARD.

Valley Falls, Kan., April 9, 1915.

Gentlemen: In checking over my order for garden seed I find that I am short one packet of Ponderosa tomato. Probably someone overlooked it. I know that you will make it right, as you have always been fair in all of your dealings with me. All the seed I bought from you last year were A-1.

Yours truly,
A. R. FORD.

Diggs, Va., April 23, 1915.

Gentlemen: I raised your Magi Queen tomato last year and believe there is none better. I planted the seed after others had set out their plants, and had ripe tomatoes a week ahead of them. I thought that would do for me.

Yours truly,
W. J. BROOKS.

McKinney, Tex., Feb. 16, 1915.
Dear Sirs: I received my catalog and seed order and I am pleased with the same. I planted your seed last year and had a fine garden. Please send me a packet of your famous Magi Queen Tomato.

MRS. ETHEL CURRY.

Glasco, Kan., January 27th.

Your tomato seeds that I purchased from you last year were of good quality. I had very fine tomatoes in spite of the dry season. You will find another order from me inclosed.

E. E. BUTLER.

Russellville, Ky., Feb. 10th, 1915.

Sirs: Enclosed find order for your Magi Queen Tomato. I got some of these seed from you last year and I had the earliest tomatoes in this county and they lasted until the frost. I don't think now that I will ever use any other tomato.

Very respectfully yours,
C. S. LYNE, JR.

Veedersburg, Ind., Feb. 2.

Gentlemen: I am sending you a small order for seeds which I would like to have filled at once. Will order more later on. I am negotiating for some property here and would like to have your nursery catalog, in order to select some trees, shrubbery, roses, etc. I had grand success with the Magi Queen Tomatoes I received from you last year.

Yours truly,
ERNEST E. BAKER.

Boydsville, Ark.

Dear Sir: Enclosed you will find my order for seeds. I ordered some of your famous Magi Queen Tomato last year and raised a fine crop in spite of the severe drought. The tomatoes are sure fine.

Yours truly,
H. C. VAN GORDON.

Middleport, N. Y., January, 1915.

I want 10 lbs. of your Yellow Globe Danver Onion seed this year and would like you to make me your best price on them. I have bought my seed from you for several years past and have always had splendid results from them.

Very truly yours,
C. W. COSELMAN.

Salem, Ore., Jan. 16, 1915.

I am enclosing you a small order and I wish to state how much we like the Washington Wakefield cabbage. I have never seen a cabbage to equal it. Your Sweet Peas have always grown fine. I am ordering your "Bargain Mixture." Am enclosing in postoffice stamps.

Sincerely,
ADA S. BAKER.

Mars Hill, N. C., Feb. 18, 1915.

Gentlemen: I am sending you herewith a small order which I wish you would send to me as soon as possible. I was much pleased with your corn you sent me last year. It sure proved fine.

Yours truly,
SAM PHILIPS.

Aurora, Illinois.

Gentlemen: Please send me a copy of your seed catalog by return mail. I am quite interested in white blossom sweet clover. I have tried it thoroughly and find it is far superior to alfalfa.

Very truly yours,
J. H. LOUCKS.

151,194 BOYS AND GIRLS.

According to official reports of the Agricultural Department at Washington, there were on June 30th, 1915, one hundred and fifty-one thousand-one hundred and ninety-four boys and girls enrolled as members of the agricultural clubs in thirty-three states covered by this work, exclusive of the enrollment in the mother-daughter canning clubs. Of this number there has been an increase of more than 41,000 in the membership of various boys' and girls' agricultural clubs conducted by the state agricultural colleges and the department of agriculture in the northern and western states in the last year previous to this report. These figures are significant of the signs of the times and the intensive spirit of progress which have brought about almost unbelievable increased yields in the production of farm crops.

NOW IS THE TIME TO GET INTO OUR BOYS' AND GIRLS' PRIZE CORN-GROWING CONTEST. For full particulars SEE PAGE 26, THIS BOOK.



Everybody Loves Flowers Flowers are inexpensive, and if you select the right kind they are as easy to grow as weeds, but everybody is not familiar with the kind of flower seeds to buy and the quantity to buy to make the quickest and most satisfactory showing. We are, however, pleased to offer a very choice list of the most popular and easily grown flower seeds. They are all strictly fresh, new crop grown, and of the very best obtainable. We much regret that space will not admit of a complete illustration of all of them. We might add that we could have listed and illustrated a thousand other additional varieties, but it would have only bewildered and confused you, and we have ultimately selected the well known and most popular varieties—varieties tried and tested and known to be first-class and of the hardiest and most beautiful, and of unlimited colors.

As a matter of fact it don't take much of an investment in flower seeds to produce a very satisfactory flower garden which will give you bloom throughout the entire season.

But you owe it to your children as well as yourself, to have a nice flower garden. They like flowers and turn instinctively to these pets of mother earth. They appeal to the finer sensibilities. Nature teaches the little ones many noble lessons through the flower garden. Give them a patch by the house and watch the joy of their young faces as the first leaves come through and the exclamation of happy glee as one bloom after another appears. Don't deny your little ones these happy days in their young lives.

The question of cost is scarcely a consideration when a whole family can enjoy the beauty of a perfectly lovely flower garden for only a dollar or two.

Ratekin's Giant Branching Asters Of our long list of flowers there is none more popular and generally satisfactory than the aster. For late summer and fall display it has no equal for its double flowers, its numerous forms and free blooming. The newer varieties are of great beauty.

Bland's Early June Decidedly the earliest flowering Aster, being a week to two weeks earlier than Queen of the Market. Flowers of good size, pure white and continuous bloomers. The stems are long. Pkt., 10c.

Queen of the Market Earliest of all except the above. Mixed colors. Pkt., 5c.

Express Comet Mixed Another very early sort, of erect habit; branching white rose and blue mixed. Pkt., 5c.

Royal Purple (See cut No. 1.)—A truly royal flower, not only in sturdy character of the plant, but also in the great size and substance of the bloom, and the imperial richness of color in the flower. Of branching type. Pkt., 10c.

Crimson King (No. 2.)—A type of branching aster, producing immense large flowers of shining crimson shade, on strong, upright stems. Unexcelled as a show flower, either in beds or as cut flowers. Pkt., 10c.

Snowball (No. 3.)—A beautiful and distinct variety and the best white; of refined and faultless form and very freely productive. Fine for pot culture. Pkt., 10c.

Daybreak (No. 4.)—Large flowers, intensely double and covering the plant in profusion. Color a beautiful light sea shell pink. Flowers medium early and continuously branching. Pkt., 10c.



Balsam.

Crown (No. 5.)—The center of each flower white, surrounded by a broad margin of color—crimson, rose, violet, etc.; flowers are large, freely produced. Beautiful and showy. Mixed colors. Pkt., 5c.

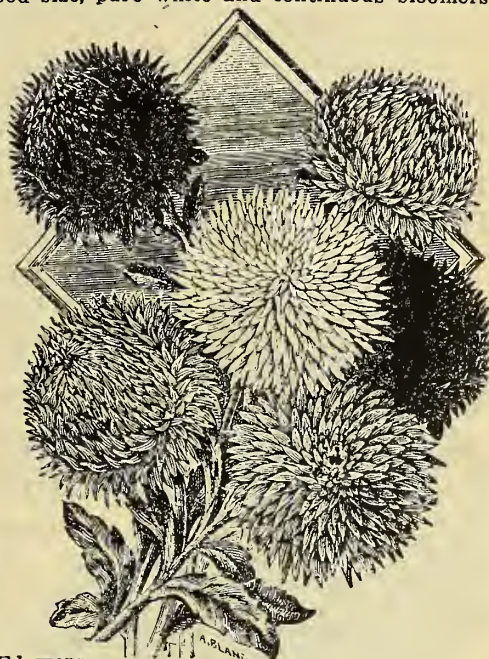
Marvel (No. 6.)—A most charming new variety from Germany. Flower large and petals pure white, beautifully striped with a band of blue, red, pink, lilac or some other distinct color down the center of each. A very brilliant and showy flower. Pkt., 10c.

Semple's Branching Flowers are large and double, borne on large, stiff stems. Mixed colors. Pkt., 5c.

Giant Comet Shape differs from all others, resembling the Japanese chrysanthemum. The flowers are from 3 to 4½ inches in diameter, perfectly double. We can furnish this variety in white, crimson, light blue and mixed colors. Each, per pkt., 10c. FINE MIXED. Embracing a great many varieties and colors. Pkt., 5c.

Lady Slippers or Touch-Me-Not These are old favorites with everyone, owing to their handsome double flowers, brilliant colors and stately growth. Half-hardy annuals.

Camelia, Flowered Double, very choice; spotted and variegated with white mixed. Pkt., 5c. FINE MIXED. Finest varieties and colors, mixed. Pkt., 5c.

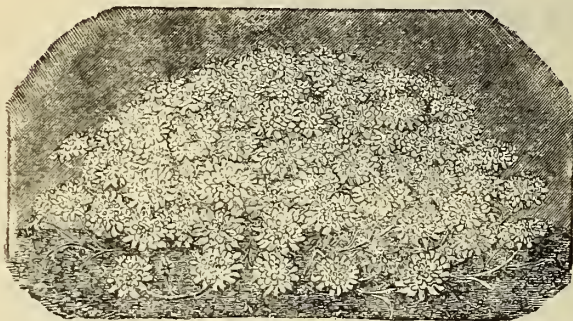


Asters.



Cash discounts on Flower Seeds in Packets: 50c worth for 40c; \$1.00 worth for 75c; \$2.00 worth for \$1.50.

Flowers



Candytuft.

are in demand; in bloom the whole summer. Also good for winter blooming in pots; succeeding in any soil. Indispensable for bouquets. Hardy annuals. Pkt., 5c.

FINE MIXED. 13-inch. Pkt., 5c.

ADONIS. Scarlet flower; best mixture. Pkt., 5c.

Calceolaria Mixed colors. Pkt., 10c.

Canterbury Bells Very ornamental garden plants of easiest culture; hardy biennial, 2½ ft. high, producing large, bell-shaped flowers of exquisite colors. Fine mixed. Pkt., 5c.

Carnation The finest of the Pink family, very fragrant. Our seed is unsurpassed. Finest mixed, the best greenhouse variety. Pkt., 5c.

Cineraria From a single plant the Cineraria is a wonder for wealth of bloom and symmetry of form.

LARGE FLOWERING MIXED. Pkt., 10c.

Cypress Vine A beautiful climber with delicate, dark green foliage, and an abundance of bright star-shaped scarlet and white blossoms, which in the bright sunshine, is a mass of beauty. Mixed colors. Pkt., 5c.

Daisy (Bells Perennials.) Will make young, strong plants to carry over winter, with protection, and blooms very early in the spring.

FINE DOUBLE MIXED. Six-inch. Pkt., 5c.

New Giant Snowball A most charming variety of this handsome little flower. Don't fail to give little beauty a fair trial, and it will be sure to please you. Per pkt., 10c.

Dahlia Every one knows and admires the Double Dahlia, but few are aware that it can be grown so easily from seed, and flowers the first season.

DOUBLE MIXED. Finest varieties, two to four feet. Pkt., 5c.

Fox-Glove (Digitalis.) Showy for backgrounds and borders, and are very beautiful when planted among shrubs. Thrives in any ordinary garden soil. Fine mixed colors. Pkt., 5c.

Dianthus (Pink.) The China and Japan Pinks are deservedly very popular, as few flowers can equal them in beauty and profusion of bloom. Pkt., 5c.

Chinese (Double Chinese Pink.) A splendid mixture; one of the finest varieties; one foot. Pkt., 5c.

FANCY MIXED. Pkt., 5c.

Candytuft (Iberis.) Among the most useful of perfectly hardy annuals. Will grow in any soil, requires no care, and produces neat clusters of flowers very freely. Pkt., 5c.

Empress A beautiful pure white variety of branching habit, producing trusses of flowers. We can recommend this for a fine bed of early white flowers. Pkt., 5c.

FINE MIXED. Including many colors. Pkt., 5c.

Calliopsis Bright golden flowers, rich velvety and orange colors in choicest mixture. Pkt., 5c.

Coxcomb A class of very magnificent, attractive and showy annuals, producing massive heads of rich shades and colors, of great effect in the garden or in plots. Well adapted to our climate, as they will stand drouth well.

FINEST MIXED. All colors; 2 feet. Pkt., 5c.

Cosmos **MANMOTH PERFECTION.**

Seed sown in April or May and transplanted to open ground will produce plants five or six feet high by September, and from then till November will be covered with hundreds of blossoms three inches across, resembling single dahlias. All colors, mixed. Pkt., 5c.

Hybridus Mixed A choice mixture of all colors and sorts. Pkt., 5c.

Forget-Me-Not Well known garden favorites. Flowers freely from seed the first summer. Blue, sky-blue, white, mixed. Pkt., 5c.

Gourds (Climbing.) These curious and interesting plants should be more largely grown. All varieties mixed. Pkt., 5c.

Four O'Clock (Marvel of Peru.) Everyone knows this favorite annual. Pkt., 5c.

Chrysanthemum A handsome plant, with striking and brilliant flowers, blooming till late in the autumn, when it is in full glory; producing double and single flowers of various shades; very attractive for bouquets and vases. Sometimes called "Painted Daisies." Hardy annuals. **Single Annual,** mixed. Pkt., 5c. **Crimson and Double Annual,** mixed colors. Pkt., 5c.

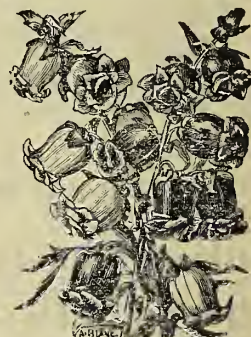
Double Camelia, Flowered These are like Asters, Pansies, Phlox and Peas, one of our specialties, which we sell to the best trade all over the country, and we know that our seed will produce fine, large, double flowers in great abundance.

Antirrhinum (Snapdragon.) Gaily colored flowers. Choice mixed. Pkt., 5c.

Bachelor's Buttons It is a beauty, the national flower of Germany, and a great favorite in all parts of the old country. An unique little plant, forming a dense mass of foliage, over which are borne hundreds of lovely blue blossoms, beautifully fringed and serrated. Hardy annuals; two to three feet high. Pkt., 5c.

Canna Stately and highly ornamental foliage plants, growing from five to ten feet high, and forming a most beautiful object for the lawn or large circular beds. Mixed, all colors. Pkt., 5c.

Algeratum Valuable plants for large beds or borders, and very useful where cut flowers



Canterbury Bells.



Carnation.



Heliotrope.

Flowers

Geranium

Started early, this favorite flower can be produced from the seed, and will flower the first season. Finest mixed. Pkt., 5c.

Gallardia

(Annual varieties.) Very showy garden annuals, 1 to 2 feet high. Grown in masses they are specially effective; large flowers, 2 to 3 inches across. Produced from early summer until frost; unrivaled for cutting. Pkt., 5c.

Heliotrope

A well-known, profuse flowering and deliciously fragrant plant that everyone loves. Splendid for bedding or pot culture. Can be easily raised from seed, but should be started early in the house. Half hardy perennial.

FINE MIXED. Choicest varieties mixed; 18-inch. Pkt., 5c.

Sweet William

(Finest Mixed.) Hardy plants about one foot high, of extreme richness and variety of color, and also deliciously sweet-scented. Our mixture is of the large flowered strain and contains many bright and beautiful colors and markings. Pkt., 5c.

Sunflower

Some varieties of this well known plant are very ornamental, and are effective in proper situations in shrubbery borders or as screens. Pkt., 5c.

Hollyhocks

All our seeds of this beautiful plant have been saved from the finest and largest double flowers only, and will produce flowers extremely double and in the best, brightest and most charming colors. Sow early. Double. Pkt., 5c; single pkt., 5c.

Hibiscus

Robust garden annuals; large saucer-shaped flowers of creamy yellow, with purple center; two feet. Pkt., 5c.

Hiacinthus Candicans

Giant summer flowering hyacinth of robust growth, producing spikes three feet long, of white bell-shaped

flowers, five feet. Pkt., 5c.

Ice Plant

Pretty summer annual trailer for vases and rockwork; leaves covered with ice-like drops. Much used in Europe for garnishing; half foot. Pkt., 5c.



Larkspur, New Double Hybrids.

Larkspur

(Delphinium.) Plants of great beauty, richness and endless variety of colors, with great duration and profusion of bloom. DOUBLE FINE MIXED. Many varieties and colors. Pkt., 5c.

Latana

Rapid growing, constant blooming, tender perennial plants for pot culture in the winter or garden decorations in the summer; clusters of flowers, orange, white, pink, etc.; two to three feet. Mixed colors. Pkt., 5c.

Marigold

(Tagetes.) A free-flowering plant of easy culture, with double flowers of rich and beautiful colors, producing a splendid effect, whether planted in beds or borders, and continuing in beauty until destroyed by frost. Half-hardy annuals. Pkt., 5c.

AFRICAN MIXED. Best double colors; two feet. Pkt., 5c.

DOUBLE FRENCH MIXED. Yellow, brown and crimson, beautifully striped; one foot. Pkt., 5c.

Mignonette

(Reseda Odorato.) This fragrant little plant is probably the most popular annual grown. If the plants are thinned out they will grow stronger and produce larger spikes of flowers. Pkt., 5c.

SWEET SCENTED Odorato.) The old variety, very fragrant; one foot. Pkt., 5c.

MIGNONETTE, MIXED. Many varieties. Pkt., 5c.

Morning Glories

(Fine Mixed.) A mixture of the old varieties. Pkt., 5c.

Moon Flower

(Finest Mixed.) Pkt., 5c.

Nasturtium

(Dwarf.) One of our showiest and most popular annuals, forming compact plants, making gorgeous masses of rich colored and brilliant flowers. Pkt., 5c.

KING OF TOM THUMBS. Pkt., 5c.

FINEST MIXED. Pkt., 5c.

FINEST MIXED TALL NASTURTIIUM. Pkt., 5c.

Pansy

(Heartsease.) The pansy is the most popular of all flowers grown from seed. It is everywhere popular, both for the brilliant beauty of its flowers and the long continuation of bloom.

FAUST OR KING OF THE BLACK. Pkt., 5c.

WHITE OR SNOW QUEEN. Pkt., 5c.

FINE MIXED. Pkt., 5c.

Petunias

Indispensable flowering plants for both garden and pot culture, flowering continuously. They flower in a few weeks' time from seed. Height about one foot.

SINGLE, FINE MIXED. Pkt., 5c.

ALBA. Pkt., 5c.

FINE MIXED. Pkt., 5c.

DRUMMONDI. Pkt., 5c.

Portulaca

PORTULACA. In brilliancy and beauty of colors Portulacas are unrivaled. They delight in sunny situations and light soils, where they rapidly carpet the ground.

FINEST SINGLE MIXED. Pkt., 5c.

DOUBLE ROSE, FLOWERED MIXED. Pkt., 5c.

Ricinus

(Castor Oil Bean.) Ornamental plant of stately growth and picturesque foliage, with brilliant colored fruit, producing a sub-tropical effect; fine for lawns. Pkt., 5c.

Zanzibarensis

The largest castor bean in cultivation. An entirely new class from Africa, with leaves often measuring two feet across, some being light green, others bronze brown. Pkt., 5c.

FINE MIXED. The best and choicest varieties mixed. Pkt., 5c.

Wallflower

Greatly prized for their exquisite fragrance. They grow in long, brilliant colored spikes of flowers. There are many varieties. Plants removed to pots in autumn will produce an abundance of delightfully fragrant flowers.

DOUBLE VARIETIES MIXED. Pkt., 10c.



Double Portulaca.

RATEKIN
Shenandoah
Ia

Ratekin's Double Hollyhocks.

MAKE UP YOUR ORDER FOR 50 cents worth, but don't send remittance for only 40 cents; for \$1.00 send only 75 cents; for \$2.00 worth send only \$1.50.

Flowers

Salpiglossis

One of the most beautiful of flowering annuals, forming strong, bushy plants about eighteen inches high, bearing throughout the season large flowers three to four inches across, of many beautiful colors. Sometimes called Painted Tube Tongue.

New Variveined Much larger than the common Salpiglossis. The surface is soft and velvety and wealth of color marvelous. The colors range from pure white to dark yellow, dark red and purplish black, including light and dark blue, velvety plum color, maroon, crimson, dark brown, golden and lemon yellow, white, dark, purple, black, brilliant scarlet, with all the shades between beautifully veined and mottled. Blooms all summer and till frost. Pkt. 5c; 3 pkts., 10c.

Salvia

Splendens One of the most brilliant of flowers. It thrives in any light, rich soil; often called flowering sage. Free bloomers. Brilliant scarlet. Is very fine. One of the most satisfactory of all bedding plants. Pkt., 10c.

Mrs. C. N. Page Dwarf, free blooming sort. Much earlier than Splendens; brighter color. Nothing makes such a brilliant show as a bed of Salvia; is specially fine for bordering canna beds. Offered in seed for first time. Pkt., 10c.

Stocks

Sometimes called Gilliflowers. These popular flowers are easily grown, and are so highly fragrant and of such great beauty, and have so many good qualities that they deserve a place in every garden. They should be given good, rich soil to grow in and will reward good treatment with remarkable pyramids of bloom.

Perpetual White (Princess Alice or Cut and Come Again.) Strong growth, of fine branching habit, and if sown early will bloom from May to November. Flowers very large and pure white; the more they are cut the better they like it. Deliciously fragrant. Pkt., 5c.

Perpetual Mixed A mixture of colors of the continuous blooming types of perpetual stocks. Splendid selections of seed; choicest strains. Pkt., 5c.

Large Flowering Dwarf German Most popular flower with our German customers. Our mixture contains a great variety of colors. Pkt., 5c.

Choice New Spencer Sweet Peas Noted for their distinct markings. Flowers are large, beautifully waved and fluted on the standards, with well waved wings.

The Marjorie Ratekin THE LARGEST AND BEST LAVENDER SPENCER SWEET

PEA YET INTRODUCED. The flowers are truly magnificent and of immense size. The standard is unusually large and bold, pronouncedly waved, yet standing erect and broad, frequently measuring two inches across. The color is a soft clear, rich lavender, which is enlivened by a very fair sheen of rose pink.

The large, well-spread wings are of the same coloring, frilled and well waved. It is practically a self color and branches beautifully, attracting universal admiration. The plant is extremely robust in growth, flowering most profusely. The stout stems measure 12 to 14 inches in length, and a large proportion bear four well placed flowers. Pkt., 10c; 2 pkts. for 15c, postpaid.

APPLE BLOSSOM SPENCER. Rose and bush-pink, beautifully waved. Pkt., 10c; oz., 20c; ¼ lb., 60c.

BLACK KNIGHT SPENCER. Rich, deep maroon, very large. Pkt., 10c; oz., 25c; ¼ lb., 75c.

COUNTESS SPENCER. A lovely clear pink, shading deeper at the edges, the original of this type. Pkt., 5c.

FLORENCE MORSE SPENCER. Delicate blush, with pink margin, a charmingly beautiful flower of very large size. Pkt., 5c.

HELEN LEWIS (Orange Countess). Brilliant crimson-orange, wings orange-rose. Pkt., 5c.

KING EDWARD SPENCER. Bright crimson-scarlet. Magnificent in size and color. Pkt., 10c; oz., 20c; ¼ lb., 75c.

MRS. ROUTZAHN SPENCER. Soft chamois pink, a beautiful shade, and charming as a cut flower. Pkt., 10c; oz., 20c; ¼ lb., 75c.

PRIMROSE SPENCER. The largest and finest primrose-yellow. Pkt., 5c.

WHITE SPENCER. A pure, wavy white of enormous size and splendid substance; long, strong stems. Pkt., 10c.

BLANCHE FERRY. Pkt., 5c; oz., 15c; lb., 40c.

BLANCHE BURPEE. Pkt., 5c; oz., 15c; lb., 40c.

ECKFORD MIXTURE. By mail, postpaid: Per lb., 50c; ½ lb., 30c; ¼ lb., 15c; oz., 10c; pkt., large size, 5c.

COUNTESS OF RADNOR. Pkt., 5c; oz., 10c; ¼ lb., 25c.

CUPID. Pkt., 5c; oz., 10c; ¼ lb., 25c.

BARGAIN MIXTURES OF SWEET PEAS. Lb., 30c; ¼ lb., 10c; pkt., 5c.

EMILY HENDERSON. Pkt., 5c; oz., 10c; ¼ lb., 20c.

EMILY ECKFORD. Pkt., 5c; oz., 10c; ¼ lb., 20c.

EXTRA EARLY BLANCHE FERRY. Pkt., 5c; oz., 10c; ¼ lb., 20c.

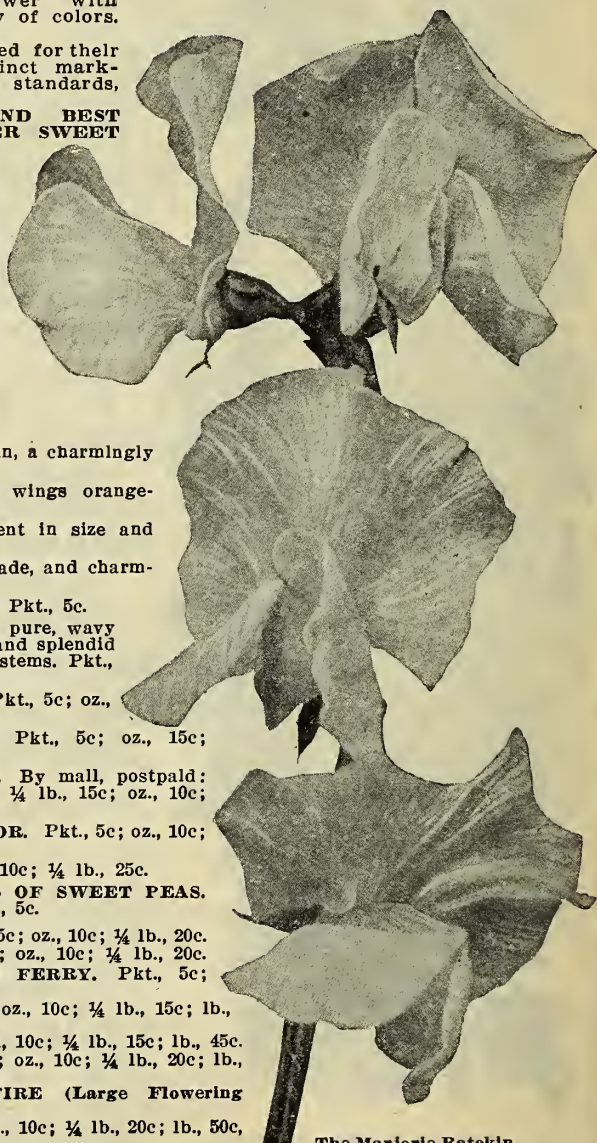
MAID OF HONOR. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

WILHELMINA. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

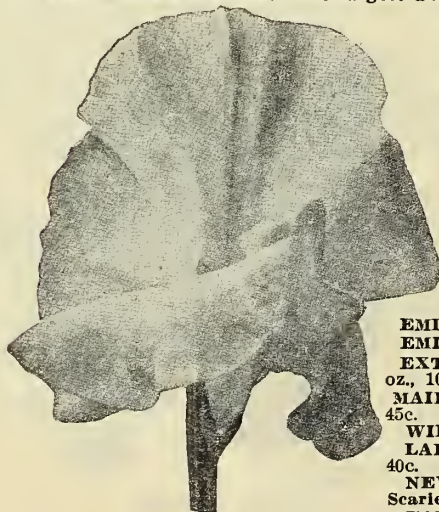
LADY PENZANCE. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 40c.

NEW DWARF OR BONFIRE (Large Flowering Scarlet Sage). Pkt., 10c.

FANCY MIXED. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c, postpaid.



The Marjorie Ratekin.



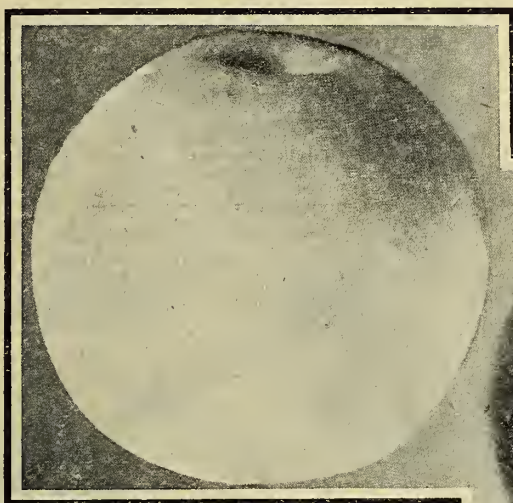
White Spencer.

RATEKIN'S NURSERY DEPARTMENT

**Hardy, Iron-clad, Productive Fruits, Ornamental Trees,
Shrubs, Climbing Vines, Roses, Etc.**

**A full assortment of General Nursery
Stock in quantities to suit the buyer**

All goods packed under cover. Stock not exposed to wind and sun. We grow and propagate a large and complete line of General Nursery Stock. Send for Big Illustrated Nursery Catalog.

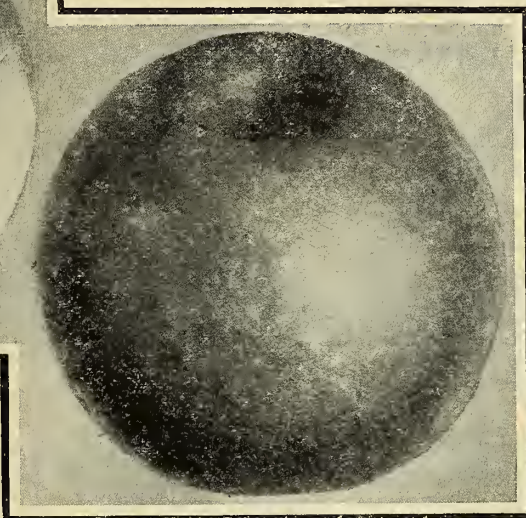


Yellow Transparent

(White Transparent, Thaler, etc.)—Origin, Russia. Season, July. Imported from St. Petersburg by United States Department of Agriculture. One of the most valuable early apples. Fruit medium smooth, transparent skin; clear white, becoming pale yellow when fully ripe; flesh white tender, fine grained, of splendid quality. Tree is vigorous and a good annual bearer.

Arkansas Black

An excellent winter apple which we unhesitatingly recommend as one of the hardest and best winter apples grown. No apple is more beautiful; splendid quality and good keeper.



While WE ISSUE A LARGE, COMPLETE ILLUSTRATED NURSERY CATALOGUE each year, we have for several years past given a synoptic, or synopsis, of our Nursery business—brief space in this our annual Seed Catalog, but owing to the space allotted have found it unsatisfactory to ourselves, as well as those who were particularly or otherwise interested in nursery stock; therefore have eliminated any detail or other descriptions from this catalog. But we have issued this year, as we think, ONE OF THE MOST COMPLETE ILLUSTRATED NURSERY CATALOGUES ever sent out by any nursery or nursery company. IT WILL BE MAILED FREE FOR THE ASKING. A postal card will bring it to your door, and if interested in Nursery Stock of any kind or description, WE WANT YOU TO HAVE IT. Your orders will be welcomed and appreciated, however small or large they may be, whether for 25c, \$25.00 or \$500.00. Our stock is very complete in every line and department, and we are in position to supply your wants in everything to be found in any nursery anywhere in the country, from a Rose or Strawberry plant—a seedling to all kinds of the largest ornamental trees. DON'T FAIL TO WRITE FOR THIS LARGE, COMPLETE, ILLUSTRATED NURSERY CATALOG if there is anything at all in the nursery line you want or are interested in. IT'S FREE FOR THE ASKING. WE CAN SAVE YOU 25 to 50 PER CENT IN PRICE and supply you with 100 per cent better stock than you can purchase from the tree peddler or tree agent, by sending direct to us for your nursery stock.

To Our Patrons

It is with a sense of pride that we look back upon our last year's achievements and wish to extend our hearty thanks to our friends and customers for the hundreds of letters we have received commending our way of doing business, and the trees we send out. We wish also to thank our friends for their hearty co-operation in helping us to get orders by sending us lists of farmers and the fruit growers' names in their section and the way they praised and recommended our Trees to their friends. Last year was the greatest of all in the history of our nursery business. We had over a million FRUIT TREES alone to dispose of, three times the amount we sold the year before, but stocks were broken and we were sold out on numerous varieties before spring, and we were compelled to return several hundred orders on account of being unable to fill them complete.

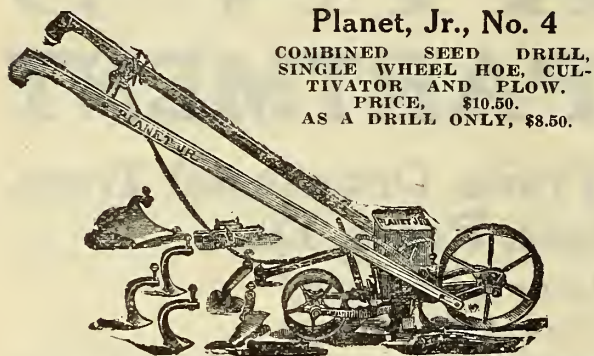
Only Salesman

Our catalogue is our only salesman. It is always with you. It is clear and logical. It tells you about our goods better than agents and tree peddlers could if they were to spend a half day with you. It costs us only one-fiftieth part as much as his time, travel and expense to see you. When he is gone you do not know from whence he came or whither he goeth, but we will always be found at our "old stand" and you can reach us at any time at the expense of a two-cent stamp. We can, and do, save you from all confusion and also save you money and give you the best, clean, healthy, thrifty stock that can be grown anywhere.

Address—RATEKIN NURSERY CO., Shenandoah Iowa.

Planet Jr. Tools for 1916

We have not the space to show the whole of the Planet, Jr., line, but will send a descriptive catalogue free on application. All Wheel Hoes for 1916 will be fitted with steel frames. This is a great improvement, as it adds largely to their durability and lasting qualities. By sending your orders to us you can rely upon getting quick service and bottom prices.



Planet, Jr., No. 4
COMBINED SEED DRILL,
SINGLE WHEEL HOE, CUL-
TIVATOR AND PLOW.
PRICE, \$10.50.
AS A DRILL ONLY, \$8.50.

This is the most popular combined tool made. It combines in a single implement a first-class hill-dropping seeder, a single wheel hoe or weeder, a cultivator and a plow. The hopper holds two quarts of seed, which can be sown in continuous rows, or dropped in hills 4, 6, 8, 12, or 24 inches apart.

The drill is detached and the tool frame substituted by removing but one bolt. It then becomes a single wheel hoe. It is useful almost every day of the season at every stage of the garden work. With this one implement the small farmer can do practically all the work in his small crops.



Planet, Jr., No. 1
COMBINED DRILL SEEDER,
WHEEL HOE, CULTIVATOR
AND PLOW. PRICE, \$9.00

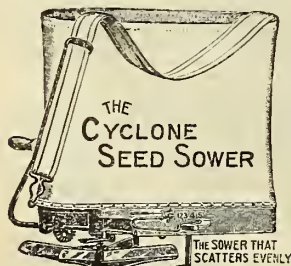
This tool is known and used the world over, and excepting our hill and drill seeders is the most perfect drill known. The hopper holds three pints, and sows in an even, regular stream, whether there is much or little seed in it. The machine is extremely simple, has no agitators, belts or gearing, and will not injure any seed.

From a drill it is changed to its other uses by removing two bolts, when hoes, cultivator teeth or plows can be quickly attached. It is a practical everyday time and labor saver, a grand remedy for the backache, and the best lowpriced combined machine on the market.

Planet, Jr. No. 12

DOUBLE WHEEL HOE, CULTIVATOR AND PLOW. PRICE, \$6.50. FITTED WITH STEEL FRAME.

Two acres a day can easily be worked with this implement, and when done it will be a better job than three men could have done in the same time with hand hoes.

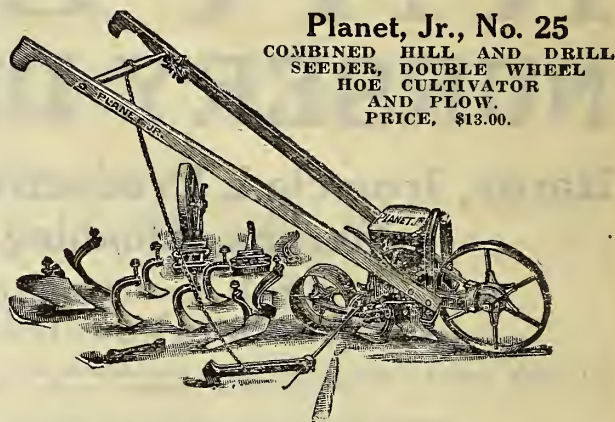


THE CYCLONE SEED SOWER

It is the greatest labor and seed saving invention of the age. The working principles are a novelty of simplicity, the result of more than twenty-five years of careful study. It is so simple in construction and perfect in operation that even a boy can operate it. It will sow Alfalfa, Timothy, Wheat, Oats, Rye, Buckwheat, Hungarian, Redtop, Turnip, Millet, Kafir, Cane, Cotton and all other grains and seeds perfectly even, any desired amount per acre, and from thirty to sixty acres a day. Full instructions and directions on every machine. Price, \$1.50.

THE CYCLONE JR. SEED SOWER—Embodies all the principal features for even distribution of seed, as found in our timetested Cyclone Seeder. It is however, built on slightly different principles. High in value, low in price. Each \$1.25.

These seed sowers are simply a phenomenal success and the most astonishing feature, is the cheapness of a machine of so useful, practicable and valuable service. Every farmer, tenant, landlord and land owner should have one. We have sold hundreds of them and in no instance have they failed to please our customers and to give entire satisfaction in the sowing of all kinds of seeds.

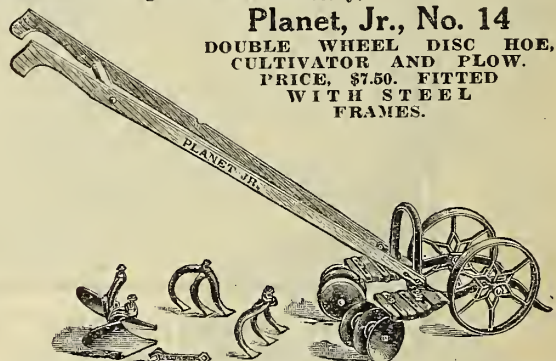


Planet, Jr., No. 25
COMBINED HILL AND DRILL
SEEDER, DOUBLE WHEEL
HOE CULTIVATOR
AND PLOW.
PRICE, \$13.00.

This new combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage and prefer not to buy separate machines.

As a drill it is almost identical with the Planet, Jr., No. 1 Drill, and is thoroughly substantial and accurate in sowing all kinds of garden seeds in hills, or drills.

As a Wheel Hoe it is practically the same as the Planet, Jr., No. 12 Double Wheel Hoe, the very best machine on the market. The change from Drill to Wheel Hoe takes but a moment, and the whole combination is one we can heartily recommend and guarantee satisfactory.



Planet, Jr., No. 14
DOUBLE WHEEL DISC HOE,
CULTIVATOR AND PLOW.
PRICE, \$7.50. FITTED
WITH STEEL
FRAMES.

This new tool will give excellent satisfaction; is especially pleasing to all who work peat lands. There are three oil tempered discs on each side.

The set of prong cultivator teeth are constructed on entirely new lines, and will be found invaluable in general cultivation.

The plows are the regular Planet, Jr., model and are continually valuable for furrowing, covering and plowing.

All Planet, Jr., Wheel Hoes are fitted with Steel Frames.

Planet, Jr., No. 17

SINGLE WHEEL HOE, CULTIVATOR AND PLOW. PRICE, \$4.50. FITTED WITH STEEL FRAME.

For easy, clean and perfect gardening, the kind that will make your garden the talk of the neighborhood and cause your face to glow with pride. Nothing is quite the equal of this No. 17.



Plymouth Co., Massachusetts Man Wins Medal of Merit On Corn

Adopting methods of intense farming, Ex-Representative A. Webster Butler of Plymouth County (20 miles south of Boston), whose farm is at Cary Hill, won the "Medal of Merit" at the Panama-Pacific Exposition for the best record in corn growing in the state. His record was 132 9-10 bushels of corn per acre, which is not only the best record ever made in Massachusetts, but in New England, and is exceeded by but few in the Central Western Corn Belt states. Four times Mr. Butler has entered state competition in corn-growing, and three times won first prize. Mr. Butler boasts of this record on Stock Beets of 385 bushels grown on one-fourth acre of ground.

Mr. Butler is a real active, scientific farmer. He does not try to see how many acres he can grow, but on his 55-acre farm tries to see how much he can make each acre produce.—Brockton Independent.

All Mr. Butler's prize winning records on corn growing and yields were made from "Diamond Joe's Big Early White," seed of which was procured from the Ratekin Seed House, he having been one of our regular and valued customers for the past 10 years.—Ratekin's Seed House.

Shawnee County, Kans., Sept. 4, 1915.

Ratekin's Seed House: Gentlemen, you ask your customers to write you about their crops and I shall accept this invitation. By referring to your books you will see I ordered some of your Gold Standard Leaming, "Diamond Joe's Big White" and "Iowa Silver Mine" seed last spring, and I now wish to say it all proved quite satisfactory, but I am inclined to give first preference to your "Iowa Silver Mine." This corn sure looks fine. The stalks are very uniform and each and every one has a good ear on it, some of them two, and I am very sure it is just what I want. I have made corn a special study for the past 15 years, having spent four years of my life at the Kansas State Agricultural College at Manhattan, Kan. I have had considerable experience in the study of corn growing, selecting and judging of corn; thus you will see I have made corn my special hobby, and for this reason it has been my aim to get something that is true to type and suitably adapted to our locality, and your "Silver Mine" seems to meet the requirements and fill the bill. I trust you will find pleasure in answering my questions and that I may hear from you at your convenience.

Most respectfully yours,

E. C. AUSERMAN.

Dear Sir: Please send me a copy of your seed catalog. I know your seeds are all right, for I have bought and planted them.

Very truly,

MRS. LEONARD STROUGH,

Beatrice, Nebr.

Gentlemen: Enclosed find my order for seeds. I tried some of your seeds last year and was well pleased with them and hope they will be all right this time.

Yours truly, WARREN HUNDLEY,

Oak Mills, Kans.

Enclosed you will find my order for garden seeds. Will send you a larger order later on. I have always found your seed to be of the best quality and have always had the best of success from seed purchased from you.

C. O. PEFLEY,

Liberty, Kans.

Dear Sir: I ordered seed from you last year and had such good luck that I thought I would send again. We received your catalog and after we had selected our seeds we let several of our neighbors have it so they could order. Enclosed find my order.

Yours truly,

JOE SHEETS,

Wellsville Mo.

Guyton, Georgia, June 8, 1915.

Ratekin's Seed House: In our trial grounds here "Billion Dollar Grass" takes the cake. The Agricultural Farms of Chatham Co. Demonstration Station want enough for 10 acres. The Central Railroad of Georgia have a demonstration farm and want enough to sow 10 acres. If you can possibly secure this seed for us get it and have it sent by express. All our farmers are crazy over this new grass.

J. W. BITTINGHAM'S SEED STORE.

The Billion Dollar Grass I sent to you for did fine—think it the very thing for this country. The little \$1.50 Seed Sower is sure a dandy, and indispensable for sowing all kinds of seed and grain.

W. T. BLOPPER,

Mountain View, Ark.

Mr. Ratekin: You are mistaken about not having received an order from me. Doubtless you have not corrected your files since I sent you my order. My seeds have been received in good time and condition and I am well pleased and wish to thank you for prompt attention my order had.

A. N. SIMPSON,

Russellville, Ark.

Enclosed find my order again for garden seeds. I have sent to you for the past two years for my seeds and have had splendid good results—never better.

Truly yours,

MRS. HARRY RADCLIFF,

Wayne Co., Iowa.

Please send me a copy of your 1915 catalog. I failed to get one this year, although I have been sending to you for seeds for a number of years past, and have always had good luck and good results from all your seeds. Will send you my order again as soon as I receive your catalog from which to make up my order.

NELS LARSON,

Marion Co., Iowa.

Enclosed find my order again for seeds for this year. The seeds I got from you last year came in good shape and did exceptionally well, considering the weather conditions.

EARL BEAM,

Crawford, Nebraska.

The seeds I got from you last year gave splendid results and I was especially pleased with the Tom Watson Watermelon and Golden Bantum Sweet Corn. Enclosed find my order for seeds again this year.

GEORGE S. WHEATON,

Caldwell Co., Ky.

Ratekin's Seed House: Gentlemen, your circular letter at hand. You say you have not yet received an order from me for seeds. You are mistaken. I ordered \$15.00 worth of seeds from you and have received them all O. K.

ROBERT REIMAL,

Glade, Kans.

My seeds have been received in good condition, all O. K., and am very much pleased with them.

Truly yours, MRS. C. T. ARDEN,

Partlow, Ky.

I have been planting your seeds for the past eleven years, each year, except one, and that year my garden failed me; lost time, labor and raised no garden. Since then I do not care to experiment with others as long as I continue to have as good luck from your seeds as in the past.

MRS. MATTIE THORP,

Bellfountain, Miss.

Lovington, Ill., Jan. 21, 1915.

Gentlemen: I have received your seed catalog for 1915 and have shown it to several of my neighbors. I have been ordering seed from you for the past six years, and have always found them to be satisfactory. I am about the only one around here who has ordered seed from you, but I believe you may expect a good number of orders from this locality the coming season. Kindly send copies of your seed catalog to the list of names I am sending you of my neighbors.

Very truly yours, J. F. MALLERNEE,

Las Vegas, New Mexico, March 26, 1914.

Gentlemen: The seeds I ordered from you were received in due time and in splendid good condition, and I want to say that you will find a permanent customer in me hereafter.

Truly yours, DOMINGO HAYES.

Dear Sir: We received the catalogue you sent us and through neglect are just telling you about it. I want to tell you that the garden seed we got of you last year were just splendid. We had a fine early garden grown from the seed we got of you. I am sending you another order today for some more seeds. We never had finer lettuce, radishes and beets—in fact everything did well. We hope to get our seeds soon.

Yours truly, MRS. WM. ROUSH,

Preston, Kans.

Bloomfield, Ky., April 1, 1915.

Gentlemen: I bought watermelon seed from you last year and I grew a fine crop. Some of them weighed as much as 36 pounds. Enclosed you will find my order for more seed.

Yours truly, ED HOBBS.

I am writing to tell you how well pleased I am with the Billion Dollar grass seed which I sent to you for. I sowed on the 20th of April and it was ready to cut June 1, 4½ feet high. It is now growing rapidly and will be ready to cut again by the middle of July; after which I want to plow it up and sow winter sand vetch. Please quote me prices and tell me something about vetch, how to sow, how much and when is the best time.

WM. ROLEND,

Higbee Valley, Miss.

Gentlemen: I am taking the liberty to write you a few lines, in order that you will keep my address on your mailing list so I will receive a copy of your seed catalog another year. I also wish to express to you my appreciation, and thanks for the treatment you have always given me. It has been more like a brother than a mere business acquaintance.

Very truly, ARTHUR GREEN

Surprise, Mo.

Dear Sir: Enclosed find my order for some of your seeds. I have used your seed for two years and they have always proven to be as you say. Please send order soon.

Yours respectfully,

T. J. STOCKTON,

Eubanks, Okla.

Please find enclosed order sheet with list of seed and send to me as you see best for by freight or express or otherwise. Also find enclosed money order for same. As regards to the Magi Queen Tomato I ordered from you last year, it was the finest and sweetest flavored tomato I ever tasted. It certainly is a grand tomato. I am going to order more tomato seed from you soon.

Yours truly, GEO. J. SEIFFERLEIN,

North Detroit, Mich.

Index

Ratekin's Reliable Vegetable Seeds Free Premiums to all; 72 to 103 Special Collections, pages 72 - 96

CORN		WHEAT SEED			
	Page		Page		Page
RATEKIN'S 32D ANNOUNCE- MENT	1	Spring Seed, Wheat.....	40	Kentucky Blue Grass.....	69
Parcel Post and Express Rates...	2	Durum or Macaroni Wheat.....	41	Johnson Grass	69
Freight Rates	3	Marquis Spring Wheat.....	41	Tall Meadow Oat Grass.....	70
CORN IS KING.....	4	Winter Wheat, "Malakoff, Rus- sian,"	42	Red Top	70
Corn, Thoroughbred Seed.....	5	Hard, Turkey Red, Kharkov, Hard	42	Creeping Bent Grass.....	70
Corn, Cost of Seed.....	5	Fultz, Northern Grown, Soft.....	42	Bermuda Grass	70
Corn, Seed Bed	5	Buckwheat, Silver Hull and Jap.....	43	Lawn Grass	70
Corn, Plowing for, Corn.....	5	Flax Seed	51	Beautify the Home with a Lawn. 70	
Corn, Cultivation, of Corn.....	6			PERMANENT MEADOWS AND PASTURES	71
Corn, What is Good Seed?.....	6			Combination Grass and Clover Mixtures	71
Corn, How We Grow Seed Corn.....	7			GRASS SEED—Continued from page 70 to 71.	
Corn, Illustration Diamond Joe.....	7			Vegetable and Garden Seeds. 72 to 103	
Corn, Diamond Joe's Big White.....	8			See Index for Varieties.....	112
Corn, Big Yields, First Prize.....	8			The Kind of Letters We Like	104
Corn, Diamond Joe Droughtproof.....	9			Flower Seeds.....	105 to 108
Corn, Iowa Silver Mine.....	10-11			Ratekin's Nursery Department— Our Nursery Catalog is Free...	109
Corn, Boone Co. White.....	11			Planet, Jr., Garden Tools.....	110
Corn, Johnson Co. White.....	11			Cyclone Seed Sowers.....	110
Corn, Special Notice; Prices.....	12			A Few Letters from Friends and Customers	111
Corn, St. Charles White.....	12			Asparagus Seed	73
Corn, Wallace's White.....	12			Asparagus Roots	73
Corn, Imperial White	13			Artichokes, Seed	72
Corn, Hickory King	13			Artichoke Roots (see page)...	55
Corn, Pride Nishna Yellow.....	14			Brussels Sprouts	73
Corn, Iowa Mammoth Yellow Dent	15			Broccoli	72
Corn, Yield—Most Bushels.....	13			Beans, Table.....	74, 75, 76,
Corn, Reid's Yellow Dent.....	15			Beans, Navy, or Boston (67).....	77
Corn, Gold Standard Leaming.....	16			Beans, Tapary (67-77).....	67
Corn, Legal Tender	16			Beets, Table	78
Corn, Improved Calico	16			Beets Stock, see pages 52-53.....	52
Corn, Iowa Gold Mine (Early).....	17			Cabbage	79, 80
Corn, Silver King (Early).....	17			Cauliflower	81
Corn, Queen of Nishna (Extra Early)	18			Carrots, Table	81
Corn, Pride of North (Extra Early)	18			Carrots, Stock, see page.....	54
Corn, White Cap Dent (Early).....	18			Celery	82
Corn, Minn. No. 13 (Extra Early).....	19			Chicory	82
Corn, Gold Standard (Extra Early)	19			Chervil	82
Corn, White Cap-Dak. Bldy. Butcher	20			Coliards	82
Corn, Flint Varieties (Early).....	20, 21,			Corn Salads	82
.....	22			Cress, or Pepper Grass.....	82
Corn, Value of Seed per Bushel.....	22			Cucumbers	83
Corn, Fodder and Ensilage Vari- eties	23			Corn, Sweet, or Sugar Corn.....	84
Corn, Stowell's Evergreen	24			Chufas, or Ground Almonds.....	85
Corn, Brazilian, Flour Corn.....	24			Egg Plant	85
Corn, Egyptian	24			Endive	85
Corn, Broom Corn	24			FLOWER SEEDS, ALL KINDS, see pages 105, 106, 107.....	108
Corn, High Yielding, Kind to Plant	25			Garlic	85
Corn, \$200 Corn-Growing Contest	26			Ground Celery	85
Corn, Appreciative Letters from Customers and Corn Growers,	27, 28, 29,			Gourds	85
.....	30			Horseradish Roots	100
Corn, Grand Sweepstakes Prize on 10 acres ground, open to all	31			Kohl Rabi	85
Corn, Boys and Girls, members of Corn Clubs setting New Pace.....	32			Kale or Borecole.....	72
Corn, Panama-Pacific Exhibit at San Francisco 1915, illustration on insert between pages 56 and 57, in center of this book.	32			Leek, American Flag.....	85
				Lentils	85
				Lettuce	86
				Melons, Muskmelons.....	87, 88
				Melons, Watermelons.....	89, 90,
				Mustard Seed	85
				Onion Seed	92, 93
				Onion Sets	93
				Okra, or Gumbo.....	94
				Parsley	94
				Parsnips	94
				Peanuts	94
				Pumpkins, Sugar-Sweet-Pie.....	94
				Pumpkins, Table and Field.....	95
				Peppers	98
				Peas, Table	96, 97
				Rhubarb Seeds, Pie Plant.....	98
				Rhubarb Roots, Pie Plant.....	98
				Radish Seed	97, 98
				RADISH, SEE PRIZE COLLEC- TION	96
				Spinach	98
				Salsify	100
				Squashes	100
				Tomato, Ponderosa	101
				Tomato, Magi-Queen	102
				Tomato, Ratekin's Mammoth Beauty	103
				Tomato, Sparks Earliana.....	103
				Tomato, Dwarf Champion.....	103
				Tomato, Chalk's Jewel.....	103
				Tomato, Small Fruited, Husk.....	103
				Turnips, all kinds.....	56

**INSURE
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SEED**

The Improved German Soil Inoculator. Nobbe-Hiltner Process

NITRAGIN

TRADE MARK REG'D DEC. 5, 1898 NO. 32212

PURE CULTURE

**THE SIMPLEST SAFEST AND SUREST SYSTEM
OF SOIL INOCULATION FOR ALL LEGUMES**



FOR SUCCESS with Clover, Alfalfa, Cow Peas, Soy Beans, Vetch—in fact all legumes—you must have nitrogen. Failure with these crops is nearly always due to lack of the necessary germ that helps the plant draw free nitrogen from the air. The air is four-fifths nitrogen—the most expensive element of all plant food. You can use this nitrogen if you grow inoculated legumes. You can be sure of a good "catch," a uniform stand, of richer feeding value.

Nitrogen gathered by the germ, or bacteria, is stored in knots, or nodules, on legume roots. Part is used by the growing crop, part goes to the soil to benefit succeeding crops. Experiments prove that an inoculated legume crop returns to the soil an average per acre of 122 pounds yearly. This is in addition to the nitrogen used by the crop itself.

The first to appreciate the wonderful possibilities of legume bacteria were Doctors Nobbe and Hiltner, of the Royal Agricultural College of Munich, Germany. For years they experimented and finally succeeded in breeding in their laboratory strong, healthy, vigorous nitrogen-gathering germs. Realizing that their wonderful discovery meant a world benefit only when the practical farmer could make use of it, Nobbe and Hiltner evolved a way of packing the germs in a medium that insured successful delivery to the farmer—the germs absolutely guaranteed to be as strong, healthy and vigorous as when they left the laboratory.



RED CLOVER.

Plant at left treated with "Nitragin" Pure Culture.
Plant at right, untreated.

This process is called the Nobbe-Hiltner Process; the product is called "NITRAGIN," the trade-mark name that distinguishes the original Nobbe-Hiltner Pure Culture from imitations all over the world.

Always look for these names. If they are on the can you are getting the original and the best. Don't risk your money on imitations.

"NITRAGIN" Pure Culture is packed in a granular medium, in a ventilated tin can. Packing date is marked on each can. The Armour Fertilizer Works positively guarantee the health, strength and virility of the germs for six months from date of packing.

Don't associate "NITRAGIN" Pure Culture with so-called liquid or jelly cultures, usually packed in corked bottles. Most of these liquids or jelly cultures are still at the experimental stage. It's well known that germ life and health depend on air. Liquid or jelly culture, used immediately, fresh from the laboratory, often give good results. But, because of the nature of the medium and its container, the life of the germ is shortened; it loses strength day by day, after it leaves the laboratory. Often the germs are lifeless when they reach the

soil, or are too weak to be of value. Direct sun rays kill or weaken bottled bacteria. The bottle containing jelly culture is usually about one-quarter filled, so as to expose the largest possible surface of the medium to the unfilled portion. The theory is that the air contained will be sufficient to maintain the life of the germ until used. There are no germs inside the jelly or liquid medium—they are present only on the surface—the part that is in contact with the air in the bottle.

The Nobbe-Hiltner improved method of packing "NITRAGIN" Pure Culture in granular form, and sending it to the farmer in ventilated tin cans is the only safe and certain way. Because of this method and the nature of the medium the manufacturers are enabled to guarantee life, strength and virility of germs for six months from packing date.

The Nobbe-Hiltner granular process provides millions of surfaces for breeding and maintaining germs. Each granule is surrounded by a film of moisture and air, permitting free circulation through the entire mass. Thus an acre can of "NITRAGIN" Pure Culture contains millions and millions more bacteria than do similar size packages of other cultures.

Success of inoculation depends in great measure to the number of germs available. In mixing with seed some germs adhere to the floor or box; others are lost in transferring seeds to drill or seeder; others adhere to the drill-box; some are improperly planted and are killed by the sun; some are destroyed by other unfriendly germs that live in certain soils. So the extraordinary number of germs in "NITRAGIN" Pure Culture—infinite more than in any other culture—provide for these losses and insure success, even under adverse conditions, where others fail.

To mix "NITRAGIN" Pure Culture with seeds you require only water—no sugar, no glue, as in some other cultures. Sugar and glue with moistened seeds make a sticky mass that requires slow, tedious handling and often means waste of seed by lumping. By using "NITRAGIN" Pure Culture you avoid all these risks and other objectionable features, and you get more germs for your money.

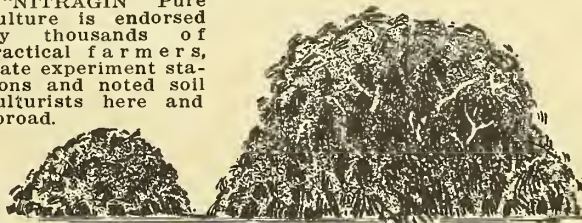
"NITRAGIN" Pure Culture has been used in Germany for seventeen years. Last year it was used on more than a million acres. This year you should use it on your Clover, Alfalfa, Cow Peas, Soy Beans, Vetch, Field Beans, Garden Peas and Beans—in fact, on all legumes.

Remember, each legume requires its own particular kind of bacteria. A special strain of "NITRAGIN" Pure Culture is prepared for each legume. In ordering be sure to name crop desired.

You are perfectly safe in buying "NITRAGIN" Pure Culture. The quality and efficacy of this wonderful product is absolutely guaranteed by the great house of Armour. This guarantee is based on results of two years of experimenting by the bacteriologists of the Armour Fertilizer Works. These men tested this product under every condition, in field and laboratory, in Europe and America. They demonstrated its superiority beyond a doubt.

The Armour Fertilizer Works, with its long record of fair dealing with farmers, planters, dairymen and stock raisers, could not afford to lend its name and endorsement to any but the best of products.

"NITRAGIN" Pure Culture is endorsed by thousands of practical farmers, state experiment stations and noted soil culturists here and abroad.



Not
Inoculated

ALFALFA

Inoculated with
"Nitragin" Pure Culture

Soil inoculation by "NITRAGIN" Pure Culture simply means seed safety and crop insurance. It is not expense, but an investment which will yield twenty-fold returns.

REASON THIS OUT FOR YOURSELF. "NITRAGIN" will insure you a stand of alfalfa. By inoculating your seed, you will avoid disappointment, also expense of lost time, seeds, labor and land. Furthermore, it will insure a heavier crop and will also result in your alfalfa bringing more nitrogen out of the free air into the soil.

YOU CANNOT AFFORD to sow this or any other leguminous crop without inoculating with "NITRAGIN" because the cost of \$2.00 per acre will pay for itself over and over again.

BE ALIVE to the modern farming ideas, which have proven themselves practical, and send us your order for "NITRAGIN."

PRICE: "NITRAGIN," per acre, postpaid, \$2.10; by Express, 1 acre, \$2.00; 10 acre can lots, \$1.95; 20 acre can lots \$1.80; 40 acre can lots, \$1.85; 50 acre can lots, \$1.80. See Parcel Post Rates, page 1.

New Jersey Agricultural Experiment Station Bulletin No. 226
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(Alfalfa yield increase due to NITRAGIN" was 500 per cent. Beans increased 75 per cent. Lima beans and cowpeas more than doubled.)

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